EXCAVATION
AT
DEVNIMORI

(A Report of the Excavation conducted from 1960 to 1963)

3746

R. N. MEHTA
AND
S. N. CHOWDHARY

Department of Archaeology and Ancient History,
Faculty of Arts, M. S. University of Baroda.
Baroda 1966

Phone No : — 5965
Bharatiya Vidya Prakashan,
Post Box 108, Kachouri Gali,
VARANASI (U. P.)

EXCAVATION
AT
DEVNIMORI

(A Report of the Excavation conducted from 1960 to 1963)

by
DR. R. N. MEHTA
M.A., Ph.D., Diploma in Museology (M.S.U.)
Head, Department of Archaeology and Ancient History,
Faculty of Arts, M. S. University of Baroda.
AND
DR. S. N. CHOWDHARY
M.A., Ph.D.
Excavation Assistant
Department of Archaeology and Ancient History.

BHARTIYA VIDYA PRAKASHAN
P. BOX 108
KACHAURI GALI, VARANASI-1

Department of Archaeology and Ancient History,
Faculty of Arts, M. S. University of Baroda.
Baroda 1966

COPIES 500
March 1966

913.54
M E

Price Rs. 45/-

3746

Copies of this book can be had from :—

Manager :
THE UNIVERSITY PUBLICATIONS SALES UNIT
Near Palace Gate, Palace Road, Baroda.

Printed by Ramanlal J. Patel, Manager, The Maharaja Sayajirao University of Baroda Press (Sadhana Press), near Palace Gate, Palace Road, Baroda and Published by Professor R. N. Mehta, Head, Department of Archaeology and Ancient History, Faculty of Arts, M. S. University of Baroda Baroda, March 1966.

Dedicated

to the memory of

Late DR. B. SUBBA RAO

राज्य संग्रहालय पुस्तकालय, लखनऊ

3746
27 1/60

राज्य संग्रहालय पुस्तकालय, लखनऊ
3746
27 1/60
State Museum, Library, Lko.

FOREWORD

The Department of Archaeology and Ancient History of the M. S. University of Baroda carries on a systematic study of the material culture of India by exploring and excavating ancient sites. It publishes its findings in the M. S. University Archaeology Series.

Following this tradition, the report of the excavations conducted at Devnimori from 1960 to 1963 is being published. This excavation resulted in the discovery of Buddhist stupas, viharas and other antiquities. One of the caskets with the relics of Dashabala (Buddha) is an outstanding discovery in this group. I am sure the scholars in the field will find this publication a useful one providing new data in the subject.

Baroda-2.
10th February, 1966.

C. S. Patel.
Vice-Chancellor,
M. S. University of Baroda.

PREFACE

This report of the excavations conducted for four seasons on the *Samgharama* in the Valley of Devnimori, in the Bhiloda Taluka, Sabarkantha District, Gujarat State, is the culmination of our archaeological activity in this part. Initially, the work was carried on by Dr. B. Subbarao, Dr. R. N. Mehta and Dr. S. N. Chowdhary. But, the sad demise of Dr. B. Subbarao was a great loss to all of us, who brought the work to completion.

This activity would not have been possible without the close co-operation of the local gentry. Thakore Saheb Shri Surajmallasimhji Jadeja very willingly allowed us to excavate in his private property and constantly helped us in the manifold problems associated with the camp life. He and his family members Sarvashri Jashavantsimhji, Shivasimhji and others continuously took an active interest in our work, and guided us to many places where archaeological relics were available.

The field studies were carried out by a compact team of our Department. Constant vigilance and hard work of Shri Ramesh Khatri and Shri Maneklal Varma are responsible for most of the survey maps, plans and charts. Shri Dashrath Panchal also had his share in this work. The photographs were taken by Shri R. C. Sutaria. The excavations were supervised by the members of the staff. Those who rendered us valuable assistance were Sarvashri A. A. Desai, Y. A. Raikar and A. J. Patel. Batches of students from the Department as well as those from other departments rendered invaluable service in this effort. The news of the discovery of the Buddhist Stupa and the relic casket attracted wide attention as a result of which hundreds of visitors, school children, teachers, college teachers, as well as State Officials came to the site. Arrangements were made for guiding them. Enthusiastic students like Shri B. M. Majmudar, Shri Surendra J. Vyas, Shri K. H. Patel as well as the staff members—Shri R. A. Thatte, A. J. Patel and R. J. Khatri did much useful work. Shri M. L. Joshi typed at the whole Mss. very neatly.

This report is drafted by the staff and students as noted in the contents. The illustrations are prepared by our technicians. The book-cover is made by Shri S. V. Bedelkar. We gratefully acknowledge the kindness of the authorities of Lucknow Museum and Museé Guimet for pl. XVIII A and C. In writing this report, many scientific problems were tackled by Dr. K.T.M. Hegde and Dr. (Mrs.) D. R. Shah, both of our department. We are grateful to Dr. H. D. Sankalia for going through the MSS. and offering many useful suggestions. The proof reading was done by enthusiastic colleagues, Dr. (Mrs.) D. R. Shah, Shri K. H. Patel and Shri M. P. Thakore. We would be failing in our duty if we do not sincerely acknowledge the willing co-operation of the Press Manager and his staff. We however, crave the indulgence of the readers for the faults of omission, commision or oversight in proof-reading.

We are grateful to the University Grants Commission for their grant for this publication and to all the associates for their willing co-operation and enthusiasm. Our gratitude is also due to Dr. J. M. Mehta, the Ex-Vice-Chancellor of the M. S. University of Baroda, whose keen personal interest was always a source of inspiration to us. Dr. C. S. Patel the present Vice-Chancellor constantly encouraged us in all phases or our activities and helped us by giving very valuable suggestions. Dr. B. J. Sandesara, the Director, Oriental Institute and Dr. U. P. Shah, the Deputy Director of the Oriental Institute also encouraged us by maintaining constant touch with our work and giving wide publicity to our preliminary work through the Journal of the Oriental Institute.

Our thanks are due to Dr. Jivaraj N. Mehta and Shrimati Hansa Mehta, whose active interest saw us through many difficult problems of organization. Shri Manubhai Patel, the ex-deputy minister of Education also gave us necessary assistance. We are most grateful to Shri Humayun Kabir, the Ex-Minister of Education and Shri A. Ghosh the Director-General, Archaeological Survey of India for their keen interest in our work.

This work would not have been printed without the financial assistance of the University Grants Commission, New Delhi.

Makara Sankrant
Vikram Samvat 2022

R. N. Mehta
S. N. Chowdhary

CONTENTS

Pages

Foreword v
Preface vii
List of Illustrations x
Plates xii

I. Introduction:

Geographic Position, Topography, People, Flora and Fauna, Archaeological Sites, History of Discovery, Aims and Objectives, History of Excavations, Short Summary of results—*R. N. Mehta* 1–11

II. Trenches and Stratigraphy—*R. N. Mehta and S. N. Chowdhary* 12–26

III. Chronology of the Site—*R. N. Mehta* 27–32

IV. Architecture—*R. N. Mehta* 32–66

Appendix 67–68

V. Antiquities:

Pottery, Terra-cotta Objects & Stone Objects, Beads—*R. N. Mehta* 69–122
Metal Objects—*R. N. Mehta and B. R. Subrahmanyam* 93
Glass Objects—*M. G. Dikshit* 103
Coins—*S. N. Chowdhary* 104
Bricks used in Devnimori, Caskets, Inscriptions—*R. N. Mehta, S. N. Chowdhary* 123–171

VI. Decorative Motifs—*S. N. Chowdhary*

Appendix A—Identification of foot-prints of Animals found on the bricks from Devnimori—*Mrs. D. R. Shah* 172–173

Appendix B—Treatment and Preservation of the Metal relics casket—*K. T. M. Hegde* 174–175

VII. Conclusions—*R. N. Mehta* 176–187

Appendix C—Devnimori, microlithic site of North Gujarat—*S. C. Malik* .. 188–193

Index 194–197

LIST OF ILLUSTRATIONS

Figures — *Pages*

Fig. 1 Devnimori map showing the distribution of archaeological remains. *Facing* 1
Fig. 2 Contour Plan-Mound at Devnimori. 5
Fig. 3 Devnimori 1960-63. Plan of the Excavated Area. 8
Fig. 4 Devnimori 1960-63. Plan of Trenches. 15
Fig. 5 Devnimori 1961- Plan of the Chaitya Hall. 16
Fig. 6 Devnimori 1962-63. Section between the Votive Stupas and the Maha Stupa—facing south. 18
Fig. 7 Devnimori 1962-63. Plan of Vihara-2 (S.W. Corner). 20
Fig. 8 Devnimori 1962-63. Vihara-2 (Section facing South). 22
Fig. 9 Devnimori 1962-63. Section through the southern side of Vihara-1, facing west. *Facing* 22
Fig. 10 Devnimori 1962-63. Vihara-1. N.W. Corner. 13
Fig. 11 Details of Brick-courses and Antiquities from the Stupa. *Facing* 26
Fig. 12 Chronology of the Monuments at Devnimori. 32
Fig. 13 Devnimori 1960-63. Plan of Vihara-1. *Facing* 34
Fig. 14 Devnimori. Plan and the Section of the drain. 40
Fig. 15 Devnimori 1962-63. Elevation of the Mahastupa showing the section of the trench. *Facing* 48
Fig. 16 Devnimori 1962-63. Plan showing the Casket No. 1 (Stupa). 48
Fig. 17 Devnimori 1962-63. Plan showing the lowermost dump of decorated arches etc. in the stupa. 50
Fig. 18 Devnimori 1962-63. Plan showing the pot below the stepped construction in the stupa. 52
Fig. 19 Devnimori 1962-63. Plan and Section of the stepped structure (Stupa). 53
Fig. 20 Devnimori 1962-63. Plan showing the decorated jambs and arches in the stupa. 54
Fig. 21 Devnimori 1962-63. Plan showing the arches dumped in the stupa. 55
Fig. 22 Devnimori 1962-63. First course of the drum with the central square and volutes surrounding it (Stupa). 51
Fig. 23 Devnimori 1962-63. Plan showing the Casket II *insitu* (Stupa). 57

Figures *Pages*

Fig. 24 Devnimori 1962-63. Plan showing the Casket II covered with brickwork. (Stupa). 58

Fig. 25 Devnimori 1962-63. Plan of the Drum showing diagonally laid bricks with circumscribed circle (Stupa). 59

Fig. 26 Devnimori 1960-63. Plan of the Eastern Platform (Stupa). *Facing* 60

Fig. 27 Pottery. 71

Fig. 28 Pottery. 72

Fig. 29 Pottery. 74

Fig. 30 Pottery. 75

Fig. 31 Pottery. 76

Fig. 32 Pottery. 78

Fig. 33 Stamped Pottery. 80

Fig. 34 Stamped Pottery. 81

Fig. 35 Stamped Pottery. 83

Fig. 36 Pottery. 85

Fig. 37 Painted Pottery. 86

Fig. 38 Stone objects. 88

Fig. 39 Terracotta objects. 91

Fig. 40 Terracotta and Stone objects. 94

Fig. 41 Beads. 95

Fig. 42 Iron objects. 99

Fig. 43 Iron objects. 100

Fig. 44 Iron objects. 102

Fig. 45 Casket I. 110

Fig. 46 Casket II. 119

Fig. 47 Decorative motif, acanthus. 125

Fig. 48 Decorative motifs, olive, laurel and lotus. 128

Fig. 49 Some find spots of Reliquaries in India and Pakistan. 179

PLATES

Plate I A. Bhoja Raja No Tekro or Mahastupa (Before Excavation).
B. Jambhala from the field of Amarsimha.
C. Bhoja Raja No Tekro or Mahastupa (After Excavation).
Plate II A. North-Eastern Cutting of Mahastupa.
B. Dhyani Buddha in Situ on Mahastupa.
Plate III Apsidal Chaitya (After Excavation).
Plate IV A. Method of Excavation of Mahastupa.
B. Section facing East. Inner side of Vihara I (Mahavihara).
Plate V Cutting through Mahastupa. Section facing North.
Plate VI A. Area looking West from Bhoja Raja No Tekro or Mahastupa.
B. Hearth in the Centre of Room No. 22 in Vihara I or Mahavihara.
Plate VII A. Instep (Udumber) in Room No. 23 in Vihara I or Mahavihara.
B. Section facing West. Inner side of Vihara I or Mahavihara.
Plate VIII A. Passage No. 3 with its water channels in Vihara I or Mahavihara.
B. Exterior of Vihara I or Mahavihara on the South. Section facing West.
Plate IX A. Lower Part of the Mahastupa, facing South.
B. A niche with out of context bases, Mahastupa, facing South.
Plate X A. Repaired and Original moulding above the Pradakshina Patha, Mahastupa, facing South.
B. Reconstructed Pot of Casket I.
Plate XI Casket I in Situ, Mahastupa.
Plate XII A. Decorated arches, Pillars etc. on Course No. 6, Mahastupa.
B. Decorated Jambs etc. on Course No. 59, Mahastupa.
Plate XIII A. Buddha figures from inside Mahastupa on Course No. 13. The heads of some figures are removed.
B. Buddha figures partly exposed, inside Mahastupa.
C. Buddha figures partly exposed inside Mahastupa.
D. Buddha figures as exposed in the beginning inside Mahastupa.
Plate XIV A. Pot with Kshatrap Coins as resting on Course No. 35, Mahastupa.
B. Pot on Course No. 35, covered up by the stepped structure.
Plate XV A. Stepped structure inside Mahastupa (After clearance).
B. Stepped structure inside Mahastupa (Partly cleared).
Plate XVI A. Decorated Arches and Jambs on Course No. 74, Mahastupa.

B. Buddha figure from the Drum Course No. 114, Mahastupa.
C. Buddha figure from the drum, partly cleared.

Plate XVII A. Close up of Casket II in situ.
B. Casket II as covered up by Course No. 95.
C. Casket II on Course No. 94.
D. Casket II as covered up by Course No. 96.

Plate XVIII A. A frieze showing worship of Stupa. (Courtesy Lucknow Museum).
B. Terra Cotta Plaque from Mahastupa.
C. Stupa from Ghantasala (Courtesy Musee Guimet).
D. Walls on and near the Eastern Platform of the Mahastupa.

Plate XIX A. Eastern Platform of the Mahastupa, facing South.
B. Vihara II.

Plate XX Stamped Pottery.

Plate XXI Stamped Pottery.

Plate XXII Stamped Pottery.

Plate XXIII A. Mullers.
B. Hammer Stones.
C. Pindlo.
D. Buddha.
E Buddha.
F. Support for the door.

Plate XXIV A. Sharpener.
B. Steatite Bull.
C. Rotary Quern.
D. Rotary Quern.
E. Mahishamardini.

Plate XXV A. Bull.
B. Elephant (?)
C. Unidentified Animal.
D. Elephant.
E. Face-Pot.
F. Die of four-petalled flowers.
G. Negative of Stupa.

Plate XXVI A. 1 and 6 Perforated discs or Wheel, 2, 3, 5 flesh-rubbers (?), 4 Unperforated disc.
B. Beads.

Plate XXVII A. Iron objects.
B. Iron objects.

Plate XXVIII	A.	Iron objects.
	B.	Lead and Copper objects.
	C.	Gold objects.
Plate XXIX	A.	Fragments of glass bottle.
	B.	Fragments of glass bottle.
	C.	Glass objects.
	D.	Iron object.
Plate XXX	A.	Coin of Bhartrudaman.
	B.	Coin of Rudrasena.
	C.	Coin of Vishvasena.
	D.	Coin of Vishvasena.
	E.	Maitraka Coin.
	F.	Maitraka Coin.
	G.	Maitraka Coin.
	H.	Indo-Sassanian Coin (Reverse only).
Plate XXXI	A.	Casket I.
	B.	Casket II.
	C.	Copper box in Casket II.
	D.	Contents of Copper box.
	E.	Gold Bottle in the Copper box in Casket II.
Plate XXXII		Contents of Casket II.
Plate XXXIII		Contents of Casket II (Spread out).
Plate XXXIV		
Plate XXXV		Inscription on the base of Casket II.
Plate XXXVI		Inscription on the lid of Casket II, Steatite Seal.
Plate XXXVII	A.	Buddha from Mahastupa.
	B.	Buddha from inside of Mahastupa.
	C.	Buddha from Mahastupa.
	D.	Buddha from Mahastupa.
Plate XXXVIII	A.	Buddha from Mahastupa.
	B.	Buddha from Mahastupa.
	C.	Buddha from Mahastupa.
	D.	Buddha from Mahastupa.
Plate XXXIX	A.	Buddha from inside of Mahastupa.
	B.	Buddha from Mahastupa.
	C.	Buddha from Mahastupa.
Plate XL	A.	Buddha head from outside the Mahastupa. Oval face, wavy hairstyle.
	B.	Close up of Buddha head from inside the Mahastupa. Round face wavy hairstyle.

Plate XLI A. Close up of a Buddha head from Mahastupa. Almond shaped face.
B. Close up of a Buddha head from Mahastupa, Round face.

Plate XLII A. Head of Buddha from Mahastupa.
B. Buddha from Mahastupa.

Plate XLIII A. Decorated Jamb.
B. Decorated Jamb.
C. Decorated Jamb.
D. Decorated Jamb.

Plate XLIV A. Decorated Jamb.
B. Decorated Jamb.
C. Decorated Jamb.
D. Decorated Jamb.

Plate XLV A. Decorated Jamb.
B. Decorated Jamb.
C. Decorated Jamb Purna Ghata.
D. Decorated Jamb.

Plate XLVI A. Decorated Jamb.
B. Decorated Jamb Purna Ghata.
C. Decorated Jamb.
D. Decorated Jamb Lion.

Plate XLVII A. Decorated Arch.
B. Decorated Arch.
C. Decorated Arch.
D. Decorated Arch.
E. Decorated Arch.
F. Decorated Arch.

Plate XLVIII A. Decorated Arch.
B. Decorated Arch.
C. Decorated Arch.
D. Decorated Arch.
E. Decorated Arch.
F. Decorated Arch.

Plate XLIX A. Decorated Arch.
B. Decorated Arch.
C. Decorated Arch.
D. Decorated Arch.
E. Decorated Arch.
F. Decorated Arch.

Plate L A. Decorated Arch.
B. Decorated Arch.
C. Decorated Arch.
D. Decorated Arch.
Plate LI A. Decorated Arch.
B. Decorated Arch with Central Medallion.
Plate LII A. Decorated Arch with Central Medallion.
B. Decorated Arch.
C. Decorated Arch with Central Medallion.
D. Decorated Arch with Central Medallion.
Plate LIII A. Decorated Arch with Central Medallion.
B. Decorated Arch with Central Medallion.
C. Decorated Arch with Central Medallion.
D. Decorated Arch with Central Medallion.
Plate LIV A. Decorated Arch with Central Medallion.
B. Decorated Arch with Central Medallion.
C. Decorated Arch with Central Medallion.
D. Decorated Arch with Central Medallion.
Plate LV A. Decorated Arch with Central Medallion.
B. Indo-Corinthian Capital.
C. Indo-Corinthian Capital.
D. Large Medallion.
Plate LVI A. Large Medallion.
B. Decorated Pilaster.
Plate LVII A. Single Dentil.
B. Double Dentil.
C. Cripal Dentil.
Plate LVIII A. Rectangular brick, acanthus decoration.
B. Rectangular brick, acanthus decoration.
C. Rectangular brick, acanthus decoration.
D. Rectangular brick, olive decoration.
Plate LIX A. Rectangular brick, olive decoration.
B. Rectangular brick, acanthus decoration.
C. Rectangular brick, decoration of squares.
D. Rectangular brick, Loops.
Plate LX A. Square brick, Buddha figure.
B. Square brick, Buddha figure.
Plate LXI A. Square brick, grotesque face.
B. Square brick, grotesque face.

C. Square brick, grotesque face.
D. Square brick, Animal face.
E. Square brick, Animal face.
F. Square brick, Makara motif.

Plate LXII A. Square brick, acanthus.
B. Square brick, acanthus.
C. Square brick, acanthus.
D. Square brick, acanthus.
E. Square brick, acanthus.
F. Square brick, acanthus.

Plate LXIII A. Square brick, four-petalled flowers.
B. Square brick, four-petalled flowers.
C. Square brick, four-petalled flowers.
D. Square brick, four-petalled flowers.
E. Square brick, four-petalled flowers.
F. Square brick, with square design.

Plate LXIV A. Square brick with four-petalled flowers.
B. Square brick with four-petalled flowers.
C. Square brick with lotus motif.
D. Square brick with lotus motif (?)
E. Square brick with lotus motif.
F. Square brick with acanthus motif.

Plate LXV A. Square brick with conch-design.
B. A brick, with marks of dog's paws.
C. Brick with marks of Calf's hoof.
D. Brick with a mark of Calf's hoof.
E. Brick with a mark of human-heel.

Plate LXVI A. Radiograph of Copper box (Courtesy Dr. N. A. Dave).
B. Process for opening the Copper box.

Plate LXVII A. Schist objects.
B. Foot-print of Buddha.

Plate LXVIII A. Figurine on a Jamb. (Inside of Mahastupa, Course No. 6).
B. Figurine on a Jamb. (Inside of Mahastupa, Course No. 6).

ERRATA

Page	*Line*	*Incorrect*	*Correct*
11	8	Shamlaji	Shamalaji
24	7	14 Courses	14 courses of
24	20	Vihar	Vihara
26	13	dealiug	dealing
40	Figure 14	N	S
43	25	This platform is	These platforms are
44	26	16’	16”
45	5	125”	125’
46	22	Pilaster	base
56	10	Course	courses
66	2	Courses	courses of bricks
68	9	20,000	200000
79	16	lots	dots
79	25	raw	row
90	27	dye	die
104	13	two are of	two are
104	15	Fifty four	Sixty four
104	25, 26,	stopped	stepped
106	15	bast	base
106	29	dye	die
113	22	dye	die
114	34	19.36	1.936
115	5	dye	die
116	31	flouring	flooring
120	23	Plaquze	plaque
123	5	erected	created
123	26	human form	human forms
126	9	The are	are
129	12	terracottas	terracotta objects
131	17	things	thigh
140	8, 9, 11	terracottas	terracotta figures
142	28	Almoud	Almond
146	6	band pointing	band are pointing
147	3	Stupa	Vihara I
147	22	or	of
152	7, 20	deooration	decoration
161	22	rectangules	rectangles
166	32	Cornico	cornice
168	2	placeed	placed
177	13, 23,	Malva	Malava
178	7	Sangharama	Samgharama

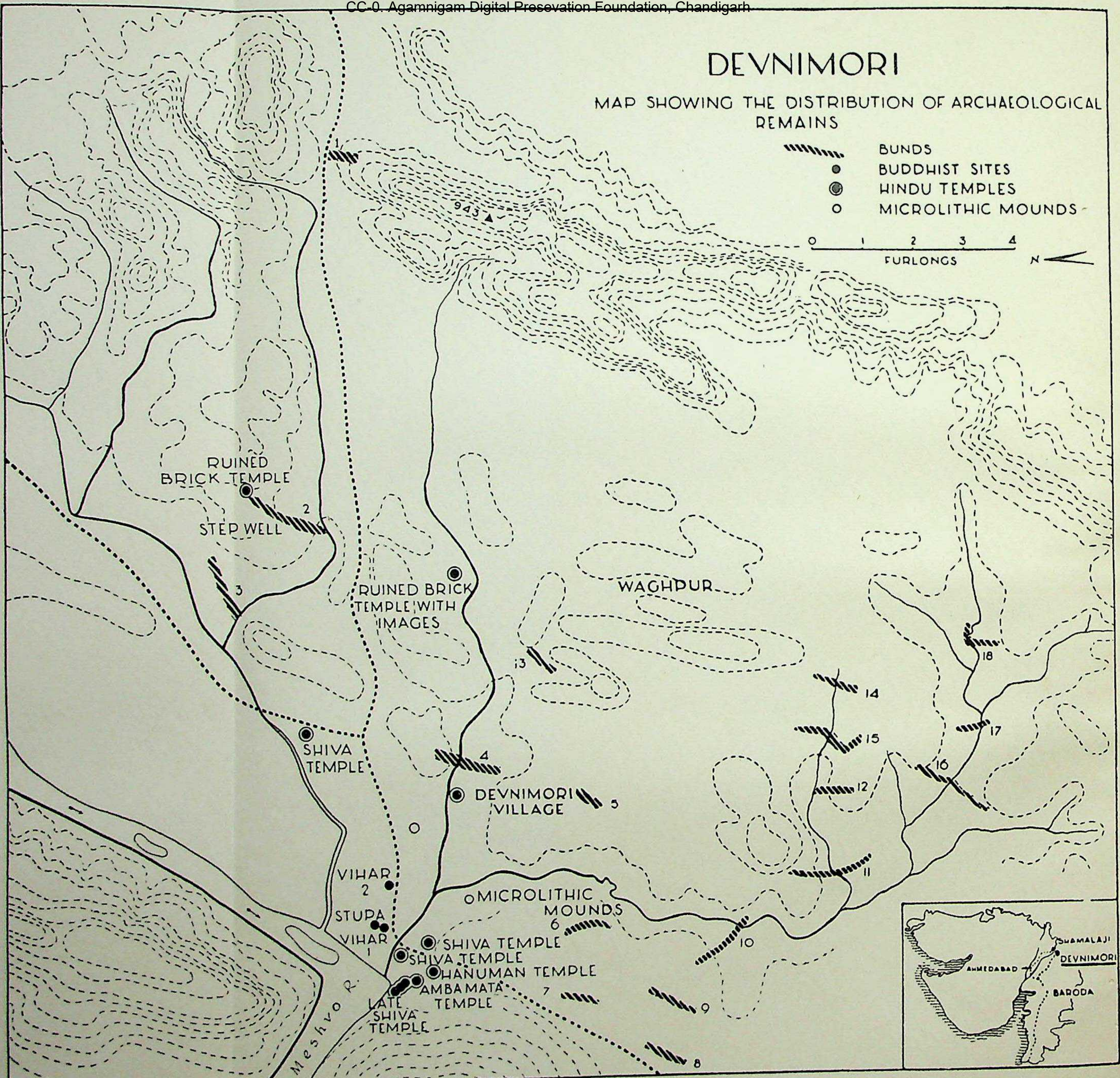

DEVNIMORI
MAP SHOWING THE DISTRIBUTION OF ARCHAEOLOGICAL REMAINS
BUNDS
BUDDHIST SITES
HINDU TEMPLES
MICROLITHIC MOUNDS
0
1
2
3
4
FURLONGS
N
943
1
RUINED BRICK TEMPLE
2
STEP WELL
3
RUINED BRICK TEMPLE WITH IMAGES
WAGHPUR
13
18
14
15
17
12
16
SHIVA TEMPLE
4
DEVNIMORI VILLAGE
5
VIHAR 2
MICROLITHIC MOUNDS
6
11
10
STUPA
VIHAR 1
SHIVA TEMPLE
SHIVA TEMPLE
HANUMAN TEMPLE
AMBA MATA TEMPLE
LATE SHIVA TEMPLE
7
9
8
Meshvo R.
SHAMALAJI
DEVNIMORI
AHMEDABAD
BARODA

Fig. 1

CHAPTER I

INTRODUCTION

Geographic Position

Devnimori[1] (73°-26′ and 23°-39′) is picturesquely situated at a distance of about two kilometers to the south of Shamalaji[2], a pilgrim centre, in the Bhiloda[3] Taluka of the Sabarkantha[4] District of Gujarat State. It lies at a distance of about 120 kilometers to the east of Ahmedabad or about 210 kilometers to the north-east of Baroda. This is the north eastern part of Gujarat lying on the border of Dungarpur area of Rajasthan.

Topography

The whole area is a hilly track with more or less parallel ridges (Fig. 1) and valleys of the Aravalli ranges. Devnimori is situated in this area, in one of the narrow semi-rectangular valleys about 16 kilometers long and 2 kilometers broad. It is surrounded on the east, west and south by low hills (about 200 meters high) which rise to the height of about 900′ to 1100′ above the sea level, whereas the valley rises to a height of about 600′ above the sea level.[5] This valley is more open in the north, but narrow gaps in the hills connect it with Gujarat and Rajasthan.

This valley is formed by the Meshvo which runs in the north-south direction before taking a sharp turn to the west where it cuts a narrow gorge and flows past Shamalaji, before entering the plain of Gujarat. Four streams flow from the local water shed and join the Meshvo at two different points. The northern, central and south-eastern streams join the Meshvo in an area of about 1/2 kilometer,

---

1. Devnimori is a Gujarati name with the meaning of " in front of Gods " This meaning is derived from the words Dev or Deva (written in Sanskrit as Deva) = God, ni suffix of possessive case, Mori = Mohri = Mohre = Face, or in front of.

2. Shamalaji (Shamal = Shyamala = black; ji = Honorific ending) is a mediaeval name meaning the black one. This name is given to Vishnu, who is worshipped here. From this temple the small village derives its name.

3. Bhiloda = the settlement of Bhils.

4. Sabarkantha = The bank of the river Sabarmati; hence the valley of Sabarmati.

5. Due to the transition of the measurement system from the British to the metric system, old system is used where the new scales are not worked out.

near the gorge of Shamalaji. The northern nala runs from Degamda area, flows past Lusadia and joins the Meshvo near the central system.

The central and south-eastern nalas join one another before their confluence with the Meshvo. The central nalas emerge from the eastern hillocks and flow past the village of Devnimori. The south-eastern nalas also come from the hills to the south-east and west. They join the central system before their confluence with the Meshvo. These are small streams which overflow in monsoons and rapidly dry up in other seasons. So the water is obtained from wells, artificial or natural ponds and deeper holes in the beds of the nalas and the river specially in summer. These holes not only supply the much needed water, but, also edible fish.

But the southern stream runs a little longer; emerging from Hematpur it meanders past Adhera, Chapra, Kudel and cuts the hills between Jitpur and Dadhalia and joins the Meshvo near Bakrol.

These streams are separated from one another by a series of low hillocks, the outcrops of the Aravalli range and consist of quartzites, schists and quartz. These tilted series are seen as small outcrops in the valleys where they have been utilised as a base for bunds or as residential areas.

The whole valley is in an advanced stage of peneplanation. The streamlets have cut down the mountain ridges and made plain fertile valleys, which are even today fine agricultural areas. Rice, wheat, sugarcane, gram, maize, tubers (Ratalu), ginger, chilli, bajri, jowar etc. are grown here in farms. On the sides of the hills small farms show terraced features.

The other formation besides the rocks and silt are the wind-blown dunes that are seen near the gorge. They extend from the river Meshvo in an area of about a square kilometer. They add to the undulations of the surface.

Climate

The valley has pleasant climate with rainfall of about 30″ in the monsoon. The winter is cool. In summer intense heat is somewhat relieved by its height and vegetation. During the day hot winds carry much sand from the dry bed of the river and deposit it on the bank. The nights are cool.

Flora and Fauna

It was an area of summer deciduous forest having the Saga, Timaru, Babul, Khera, Sadad, Mahudo, Tamarind and other trees. It abounds in wild life such as the chitta, hyaena, deer, snakes, pythons and wild fowl, a variety of birds such as doves, partridges, kites, owls, ducks, cranes. The forest has rapidly dwindled in the living memory and along with it the wild life has become scarce. In the river edible fish is obtained in deep holes, in which water is found throughout the year. The domestic animals are the cows, buffalos, goat, hen etc. which supply the manifold needs of the inhabitants of this region.

Human Settlements

The area is occupied by unnucleated settlements of Bhils.[1] The smaller nuclii are being formed, as small initial settlements are expanding under the impact of modern civilization. Specially, the Rajputs and the Thakardas are mainly responsible for the initial nucleated villages.

The inhabitants are mostly agriculturists. In their spare time they take to hunting and collection of forest products. They get their requirements from Shamalaji where a few shops have now sprung up. Before these shops were established necessities of life were purchased in fairs at Shamalaji, Isari and other places.

Relationship with neighbours

This forested region had the attraction for the dwellers in the plain because of its timber and forest products. Shamalaji attracted some pilgrims. Its other and possibly the most important attraction was the route joining Gujarat with Dungarpur and Mewar region. These attractions were responsible for the contact of this region with its neighbours.

Archaeological Sites

The valley has a number of archaeological remains, which lie on the left bank of the Meshvo and are distributed in an area of about 4 square kilometers. Some of them are clearly seen as distinct topographical features, whereas others form small eminences.

Bhoja Raja No Tekro (Pl. I A)

This mound was locally known as Bhoja-Raja-No-Tekro, because according to the tradition Bhoja Raja, a prince from Cutch visited Thakore Amarsimhaji (1620-1675 A.D.). His camp was in a fine garden near a large mound. It is known from that period as Bhoja-No-Timbo[2]. The name Bhoja-Raja-No-Timbo

---

1. It is interesting to note that they style themselves as Garasias.
2. The information received from Thakore Saheb of Devnimori.

or Tekro[1] is also used for this mound. This most prominent archaeological feature was a subconical mound with the base having a radius of about 120′ and the height of about 40′. It was covered by scrub, large tamarind and mahuda trees. In the steep sides of this mound bricks were seen. The P.W.D. had put some shafts to determine the quantity of the brick powder that could be available for the new dam that was being constructed. This solitary mound was an important feature in the landscape. The large sized bricks suggested that it was a structure of some importance.

Fields around Bhoja-Raja-No-Tekro

The land around the mound was more undulating. A few low mounds were seen in the area. The largest of these mounds was lying to the south of Bhoja-Raja-No-Tekro (Fig. 2). It was a semi-rectangular mound with large trees and scrub growing on and around it. This mound was exploited by the local gentry for removing bricks from it. This rectangular mound had a depression in the centre. It was also an archaeological site as could be judged by the remains of the bricks and some pottery. The area to the east of these mounds was also undulating. Signs of brick walls were clearly observed on the road. In the adjacent fields there were small mounds from which bricks were obtained but from one of these mounds a schist image of Jambhala was obtained (Pl. I B).[2]

Shiva Temple Site

Beyond these mounds the natural earth was seen. At a distance of about 600 meters to the east of this site was a small mound containing bricks and a small Shiva-linga. This suggested that it was a Shaivite temple. It was also robbed of a major part of its brick contents.[3]

Other Temples

Similarly, a small sub-conical mound was observed to the west of the Bhoja-Raja-No-Tekro. A Shiva-linga was perched on it. Bricks were clearly seen in the cutting. Another low, sub-conical mound was noted at a distance of about 200 meters to the south of it. Here a Shiva-linga was seen. Local inquiry suggested

---

[1] The synonyms Timbo and Tekro are used indiscriminately.

[2] These are the fields of Soma Koya, Kodar Vechhat and Amarsimha. The Jambhala was obtained by Amarsimha who kindly gave it to us for study.

[3] The field of Shivsimha Makansimha Jadeja.

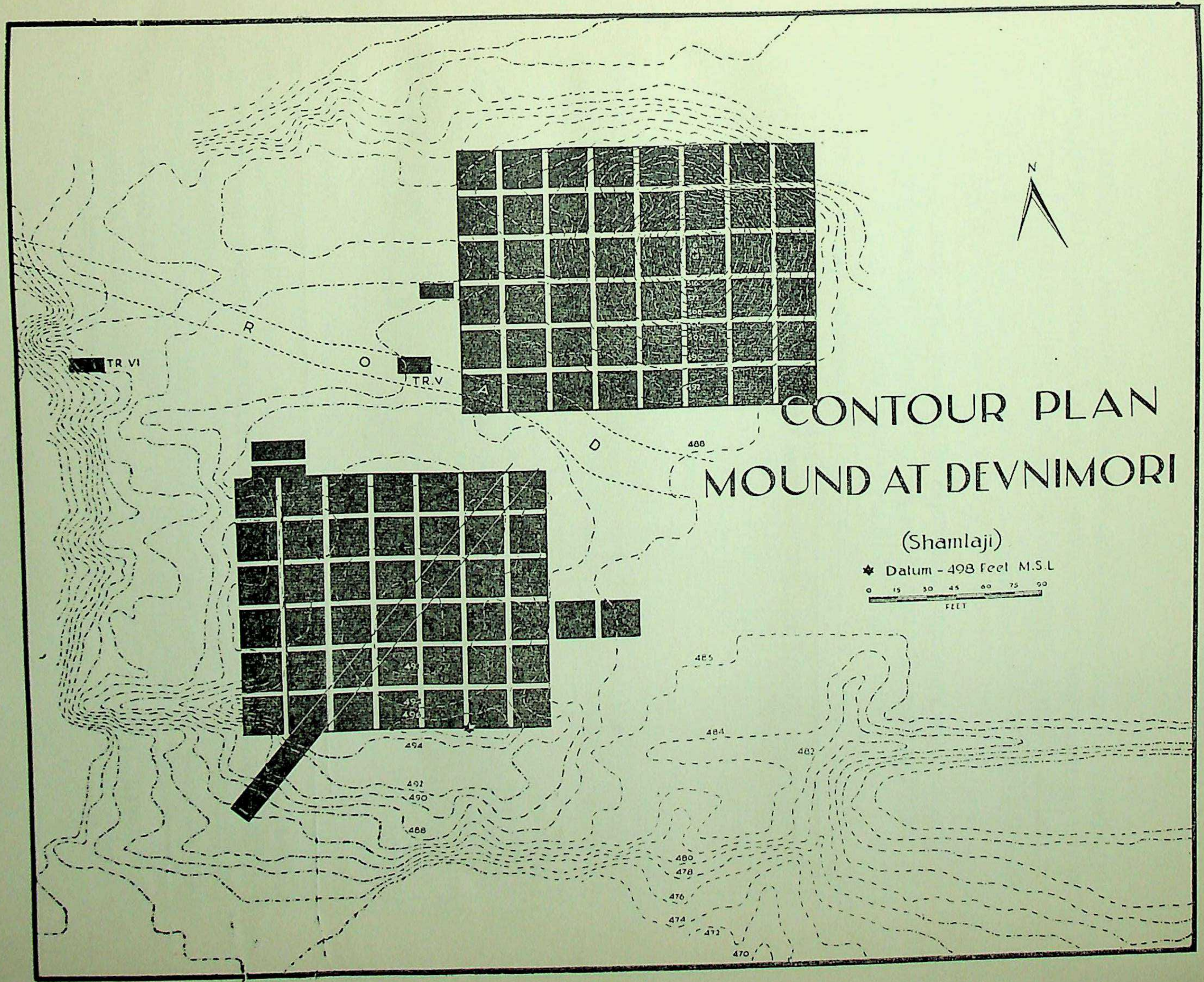

CONTOUR PLAN
MOUND AT DEVNIMORI
(Shamlaji)
Datum - 498 Feet M.S.L
0 15 30 45 60 75 90
FEET
N
R
O
A
D
TR VI
TR.V
488
485
484
482
494
492
490
488
480
478
476
474
472
470

Fig. 2

that a beautiful image of Ganesha was removed from this place. Such small mounds with bricks were traced on the northern outskirt of Devnimori; behind the village, and near the village of Rampur and on the flanks of the western hill as noted on the map (See Fig. 1).

Earth works

Besides these numerous earth-works of different dimensions are seen in the environs of Devnimori, Rampur, Hematpur and Padardi. They are all bunds meant for water conservation. Their details are noted in the following table:

No.	*Place*	*Length*	*Breadth*	*Height*	*Composition*	*Direction*
1.	Bhim Pagala	205′	124′	28.45′	Stone, Earth	N.E. × S.W.
2.	Rampur	927′	141′	14.65′	Brick (15″ × 10″), Earth, Stone	N.E. × S.W.
3.	Padardi	650′	100′	16.77′	Stone, Earth, Brickbats	East × West
4.	Devnimori	750′	125′	19.90′	Stone, Bricks (14″ × 9″ × 2½″) Earth	N.E. × S.W.
5.	Devnimori	275′	74′	10.69′	Stone, Earth	N.E. × S.W.
6.	Devnimori	585′	74′	7.15′	Stone, Earth	N. × S.
7.	Devnimori	380′	70′	11.10′	Stone, Earth	N.E. × S.W.
8.	Devnimori	525′	75′	12.50′	Stone, Earth	N.E. × S.W.
9.	Devnimori	400′	75′	9.40′	Brickbats, Stone, Earth	N.E. × S.W.
10.	Devnimori	750′	84′	12.29′	Brickbats, Earth	N.W. × S.E.
11.	Devnimori	850′	72′	10.79′	Stone, Earth	N.W. × S.E.
12.	Devnimori	375′	90′	14.50′	Stone, Earth	North × South
13.	Vaghpur	340′	98′	16.25′	Stone, Earth	N.E. × S.W.
14.	Vaghpur	435′	90′	13.31′	Stone, Earth	N.E. × S.W.
15.	Vaghpur	812′	74′	20.61′	Earth	N.E. × S.W.
16.	Hematpur	815′	70′	8.67′	Stone, Earth	N.E. × S.W.
17.	Hematpur	350′	69′	6.04′	Stone, Earth	North × South
18.	Hematpur	535′	75′	12.45′	Stone, Earth	North × South

Microlithic sites

The other archaeological relics were distributed on the loessic mounds which lie to the south of the Bhoja-Raja-No-Tekro. Cores of chert, agate, chalcedony, quartz etc. resembling those from North Gujarat were obtained from the surface of these mounds. These loessic mounds are distributed on the central and south-eastern stream system of Devnimori. The fields here are named after the owners or some prominent trees. A field in which a trench was excavated is owned by

Thakore Saheb, but it is known as Dhenk Vadalo or the field with a banyan tree. [Vadalo (Ficus Bangalensis) on which Dhenk (cranes) used to rest.]

All these antiquities suggest that this valley was once very active but at a later date the habitation and the utilization of this valley came to a standstill, until it was reopened by the present Jadeja Rajputs.

Excavated Sites

Out of these sites only a few have been partially or completely excavated. These are:

(1) Bhoja-Raja-No-Tekro
(2) Field to the south
(3) Field to the east
(4) Subconical mound to the west of Bhoja-Raja-No-Tekro
(5) Loessic mound—field of Mansimha Jadeja
(6) Loessic mound—Dhenk Vadalo—field of Thakore Saheb.

The excavations clearly suggest that the first three sites are parts of a Buddhist settlement. No. 4 was an old temple and numbers 5-6 were prehistoric sites of microlith-using folk. This report deals with the Buddhist settlement (Fig. 3) only, the material from other digs is only passingly noted.

History of discovery

Shamalaji and Devnimori area was almost a terra incognito thirty years ago. P. A. Inamdar of the Idar State, first drew attention of the scholars to standing monuments and sculptures in his book entitled *Archaeological finds in the Idar State*[1] and has briefly referred to the buried monuments. His researches were followed up by Dr. H. Goetz[2] and Dr. U. P. Shah[3] who worked on the early sculptures of this area. The latter published the results of his study in *Sculptures from Shamalaji and Roda*. The temple trust of Shamalaji issued a Gujarati booklet in which mythological and historical account of this area is published. Dr. M. R. Majmudar has also written some papers on the antiquities from this region. They describe a

---

1. Inamdar, P. A., *Some Archaeological Finds in the Idar State*, 1936.

2. Goetz, H., Gupta Sculptures from North Gujarat, *Journal of the Gujarat Research Society*, Vol. XIV, No. 1, p. 2 ff.

3. Shah, Dr. U. P., Sculptures from Shamalaji and Roda, *Bulletin of the Baroda Museum and Picture Gallery*, 1960.

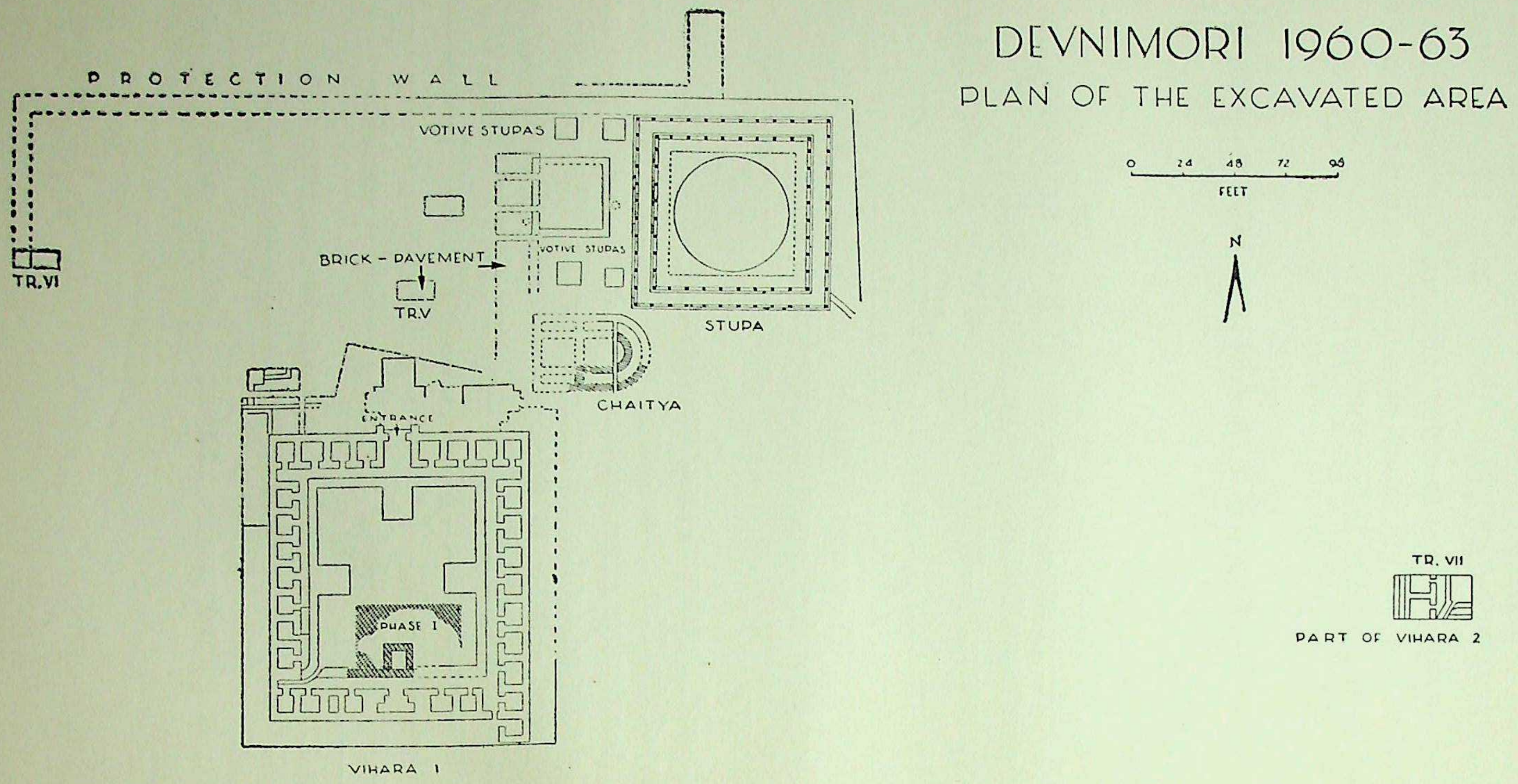

DEVNIMORI 1960-63
PLAN OF THE EXCAVATED AREA
0
24
48
72
96
FEET
N
PROTECTION WALL
VOTIVE STUPAS
VOTIVE STUPAS
STUPA
CHAITYA
BRICK - PAVEMENT
TR.V
TR.VI
ENTRANCE
PHASE I
VIHARA I
TR. VII
PART OF VIHARA 2

Fig. 3

few elements of the temple and sculptures. After that it was explored by a number of scholars.

Shri S. N. Chowdhary of this department once more studied the area. In Devnimori Valley there were a number of mounds as noted above. Out of them Bhoja-Raja-No-Tekro and the fields around it were most prominent. This being the case, they were taken up for study. The excavations were conducted first on these mounds and then a few small mounds were also opened for study. Besides excavations, intensive exploration of the area was carried on, in the spare time specially in the last season. As this work was progressing, its preliminary results were published in the *Journal of the Oriental Institute, Baroda*[1], and *Indian Archaeology—a Review*.[2]

Aims

Preliminary investigations had revealed that the area was rich in archaeological remains. It was to be submerged in a new water reservoir (Shyam Sarovara), therefore, extensive explorations and excavations were undertaken to study the human activity in this region. The excavations were aimed at the identification of the buried remains, and to arrive at their chronology.

History of Excavations

It was decided in 1959, to excavate the site of Bhoja-Raja-No-Tekro and the adjacent mound at Devnimori. The excavations were started on 11th February 1960 to find out the general nature of the site. These excavations proved that the Bhoja-Raja-No-Tekro was a stupa and the adjoining field was a vihara. This was very encouraging for it led to the discovery of an interesting historical site. The excavations were continued upto 20th April 1960. As the monsoon was approaching, the excavations were concluded for this year and were resumed on 6th February and were continued upto 21st April 1961. This season many parts of Vihara I were opened. Besides this, the surroundings as well as the remains of the outer face of the stupa were cleared. As a few microliths were discovered from the loessic mounds in the Devnimori area to the south of the Vihara I, two small trenches were put on them, to study the prehistoric material from this area. This material was separately studied by S. C. Malik.

---

[1] Chowdhary, S. N., Excavation of a Buddhist Stupa and a Vihara at Devnimori near Shamalaji—North Gujarat, *J.O.I.*, IX, No. 4, p. 451 ff.

Mehta, Dr. R. N., and Chowdhary, S. N., Preliminary Note on the Excavations of Devnimori Stupa, 1962-63, *J.O.I.*, XII, 2, Dec. 1962, p. 172 ff.

[2] *Indian Archaeology—A Review*, 1959-60, 1960-61.

In the third season in (1961-62, 28th November to 15th February), excavations were resumed on the stupa to study some constructional features and to find out the relic casket. Unfortunately, the corner selected did not yield much results, hence, in 1962-63 (13th Dec. to 3rd April 1963), excavations were resumed to study the inner construction of the stupa and to discover the relic casket, as well as to clear some problems connected with the Vihara I. As the area was to be submerged as already noted above, it was also decided to study the other remains, by exploring them, and by excavating a few of them to understand their nature. For this purpose, a subconical mound to the west of the stupa was partially excavated.

Short Summary of the Results

The excavations in the Devnimori area were concentrated on the Buddhist settlement. Besides, preliminary trenches were excavated to study the microlithic sites and old temples as noted above.

The microlithic tools of chert, agate, chalcedony etc. were obtained from the loessic area.

The most important discovery with which this report is mainly concerned, was that of a Buddhist settlement having at least two viharas, a large *Sharira* stupa, four *Uddesha* stupas, a rectangular structure, apsidal temple and a protecting wall.

The settlement seems to have started with the erection of the large vihara. Near this vihara, the *Sharira* stupa was built by Sadhu Agnivarmma and Sudarshana. Alongwith it the votive stupas, the apsidal temple, the protecting wall were also built in the 4th century A.D. This settlement prospered for three or four centuries and then it was abandoned. The natural forces then partly destroyed and covered it up.

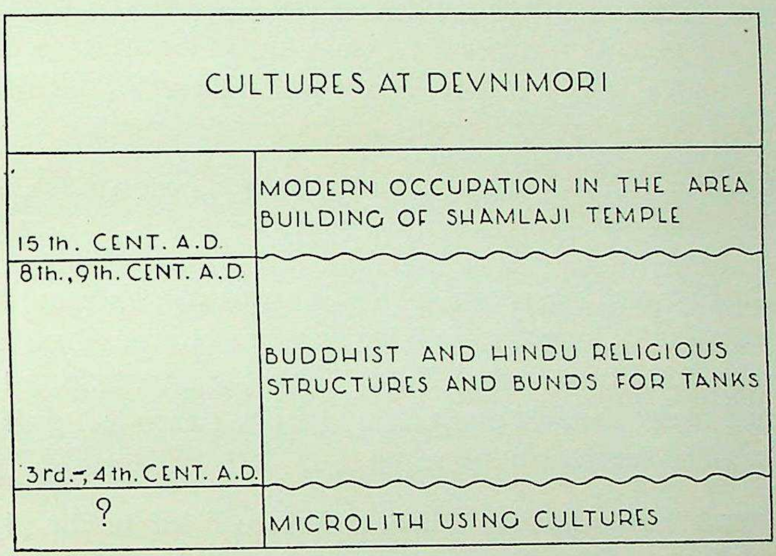
During the period of the activity, the large vihara was twice extended and at least once repaired. The stupa suggests minor repairs after it was erected.

The other vihara also shows additions. The *Uddesha* stupas were added during this time. This site had far flung contacts during its period of existence.

Near the Buddhist settlement there was a small Hindu temple, probably of the Shaivites. It might have co-existed with the Buddhist colony, as could be ascertained from the brick size.

Around these settlements there were a number of ponds which might have supplied the need of the local population.

These religious settlements and the engineering works were dependent upon the activity of the flourishing town which lies buried under present Shamalaji.[1] The following chart represents the succession of cultures as noted in this area:



CULTURES AT DEVNIMORI	
15 th. CENT. A.D.	MODERN OCCUPATION IN THE AREA BUILDING OF SHAMLAJI TEMPLE
8th.,9th. CENT. A.D. 3rd.-4th. CENT. A.D.	BUDDHIST AND HINDU RELIGIOUS STRUCTURES AND BUNDS FOR TANKS
?	MICROLITH USING CULTURES

---

[1] A trial trench was excavated in the village of Shamalaji, which has shown evidences of contemporary habitation.

CHAPTER II

TRENCHES AND STRATIGRAPHY

Introduction

In the area of the Buddhist settlement the mounds selected for excavations were:

(1) Bhoja-Raja-No-Tekro,
(2) The field to its south, and
(3) A small mound to the east of Bhoja-Raja-No-Tekro as already noted above.

In the initial stages, the nature of the site was not known; so long, narrow, trial trenches were sunk along the n.e.-s.w. axis on two of these mounds while a trial trench was laid down on the third. Two trenches helped to identify the monument buried under the field as a vihara and one trench led to the identification of the Bhoja-Raja-No-Tekro as a stupa.

Similar trench in the field of " Kodar Vechat " led to the identification of the mound as a vihara. Once these monuments were identified, the problems that required solution were as follows:

(1) their clearance and
(2) the study of their history.

The first problem was solved by re-orienting the plan of excavation. Instead of the long narrow trenches, the mounds were covered up by a grid, and then the whole site was cleared. For solving the second problem, stratigraphy of this site was observed, at a number of points, so that the history of the habitation could be studied. The following account gives the details of the trenches and stratigraphy.

Trenches

Field South of Bhoja-Raja-No-Timbo

For studying the nature of the monuments buried under this mound two long narrow trenches were initially planned.

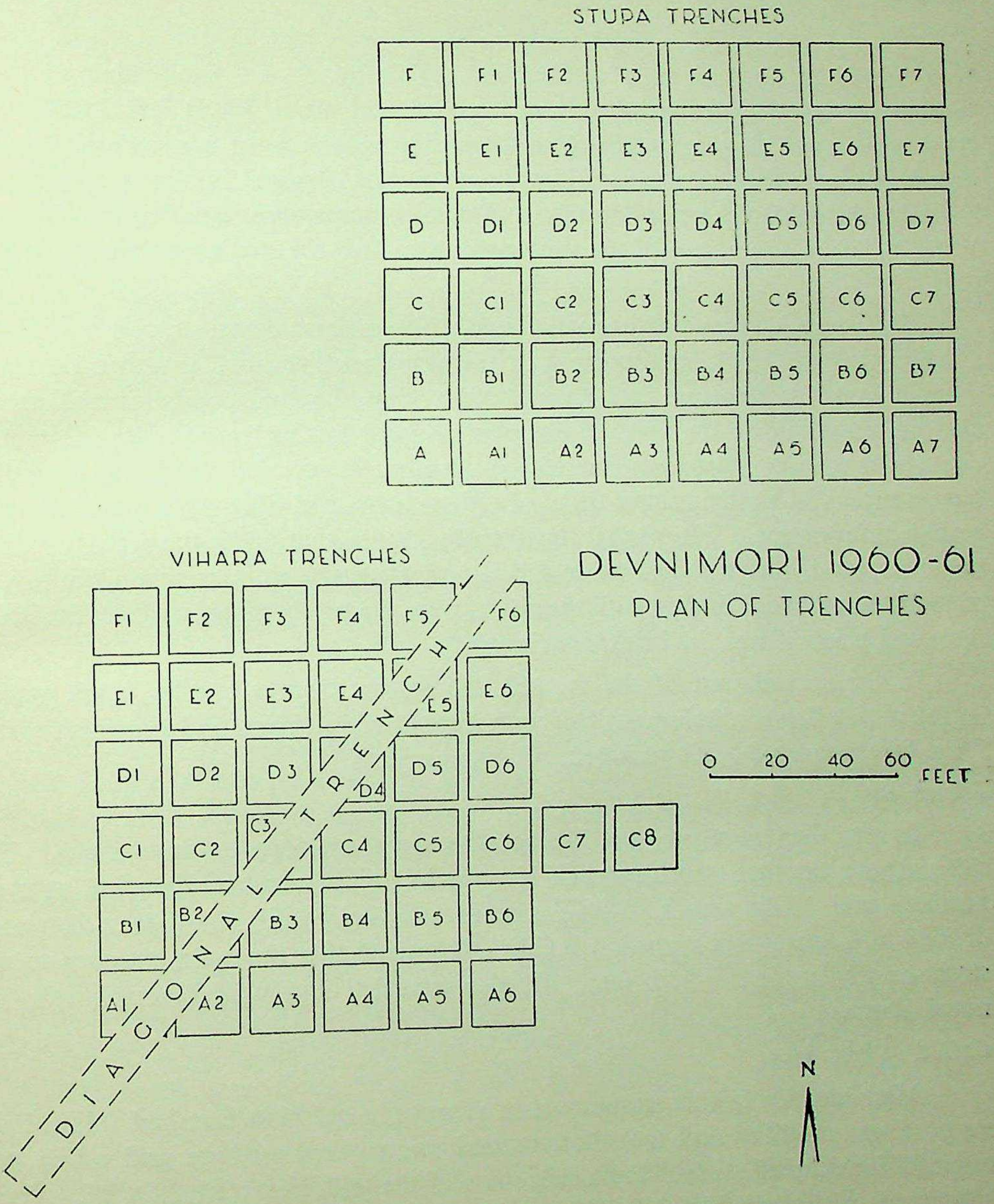

STUPA TRENCHES
F F1 F2 F3 F4 F5 F6 F7
E E1 E2 E3 E4 E5 E6 E7
D D1 D2 D3 D4 D5 D6 D7
C C1 C2 C3 C4 C5 C6 C7
B B1 B2 B3 B4 B5 B6 B7
A A1 A2 A3 A4 A5 A6 A7
VIHARA TRENCHES
F1 F2 F3 F4 F5 F6
E1 E2 E3 E4 E5 E6
D1 D2 D3 D4 D5 D6
C1 C2 C3 C4 C5 C6 C7 C8
B1 B2 B3 B4 B5 B6
A1 A2 A3 A4 A5 A6
DIAGONAL TRENCH
DEVNIMORI 1960-61
PLAN OF TRENCHES
0 20 40 60 FEET
N

Fig. 4

Trench I

In the beginning, a small trench 100′×12′ was laid in the n.e.-s.w. direction, from the s. w. corner of the mound. This trench was subdivided in small subsquares each measuring 10′×12′ and named such as A,B,C,D,E,F,G,H,I,J. etc. This trench was further extended in the n.e. to cover up the whole mound. The complete trench then measured 210′×12′. It was subdivided in subsquares of the same dimensions as the preceding ones. The subsquares were named as K,L,M,N,O, P,Q,R,S,T,U. The names of the subsquares ran from the south-west to the north-east.

This trench proved that on the south, the archaeological deposit was barely 2′ thick and the brick structure ran in the east-west direction. Further clearance showed that this structure had rooms, drain, central paved courtyard and rooms along a verandah on the north. The plan revealed by this trench suggested that it was a vihara. As this trench cleared the structure, it revealed partial stratigraphy, but an extension on the eastern side, of the southern end of it, gave detailed stratigraphic information. The partial stratigraphy proved that under the present surface brickbats, nails, roof tiles and other debris of a structure were lying on the higher parts of the mound. Buried with the debris were the partly ruined walls of the structures and below it was the brick flooring.

In the central part of the mound, the surface humus overlay black water-logged clayey deposit, below which was a deposit of brickbats and brownish earth. These layers covered brick pavement of the courtyard.

Trench II

It was then necessary to discover the main entrance to this vihara. For this purpose, another trench (trench II) was laid to the west of Trench I, near its northern end. This trench 40′×12′ running parallel to Trench I, was also subdivided in 4 subsquares named A,B,C,D. It proved that the main entrance to the structure was in the northern face. It also revealed the partial stratigraphy as noted above.

Grid I (Fig. 4).

After identifying this structure as a vihara the old plan that had fulfilled its purpose was modified and the whole mound was covered up by a grid which was essential for detailed study. Each subsquare of the grid measured 20′×20′. These subsquares were named in alphabetical order as A,B,C,D,E and F in the north-south direction. Each series was further named as A1,A2,A3,A4,A5,A6 etc. in the east-west. In the grid series, C was further extended on the east to C7, C8 to connect the field on the east with the main excavation.

After this rearrangement, the subsquares were excavated for more clearance of the structure and at crucial points such as were observed in the south-eastern corner of the mound, they were excavated upto the natural earth for the study of vertical stratigraphy. These subsquares gave the complete stratigraphy of the structure in the inner side.

Trenches on the N.W. of Vihara I

The north-western corner of the vihara showed good deposit, so it was decided to study this part in 1962-63. For studying this side, two trenches 20′×20′ were excavated just outside the vihara. These trenches were dug to a total depth of about 10′ (Fig. 10).

These trenches proved to be of great value, for the stratigraphic studies. They revealed six layers showing habitation debris and fallen structures etc. The details of these layers are given under the section of stratigraphy.

Bhoja-Raja-No-Tekro

Trench III

Bhoja-Raja-No-Tekro was also taken up for study. For this purpose, a long narrow trench 90′×15′ was laid in the n.e.-s.w. direction. This trench covered the mound from its height to the base. The digging started from the top where after clearing the upper brown earth irregular looking structure was cleaned. Leaving the central section undisturbed as it was similar to the upper section, the lower section of the trench was taken up for digging.

On this part amidst fallen debris of bricks and brickbats an image of Dhyani Buddha *in situ* (Pl II. B) was discovered. The stupa like shape of the Bhoja-Raja-No-Tekro with the upper drum-like irregular part of it indicated the possibility of its being a stupa.

Chaitya

On the south-western part of this trench, an arc of a circular structure was observed. Later clearance showed that this was the apsidal-end of a chaitya.

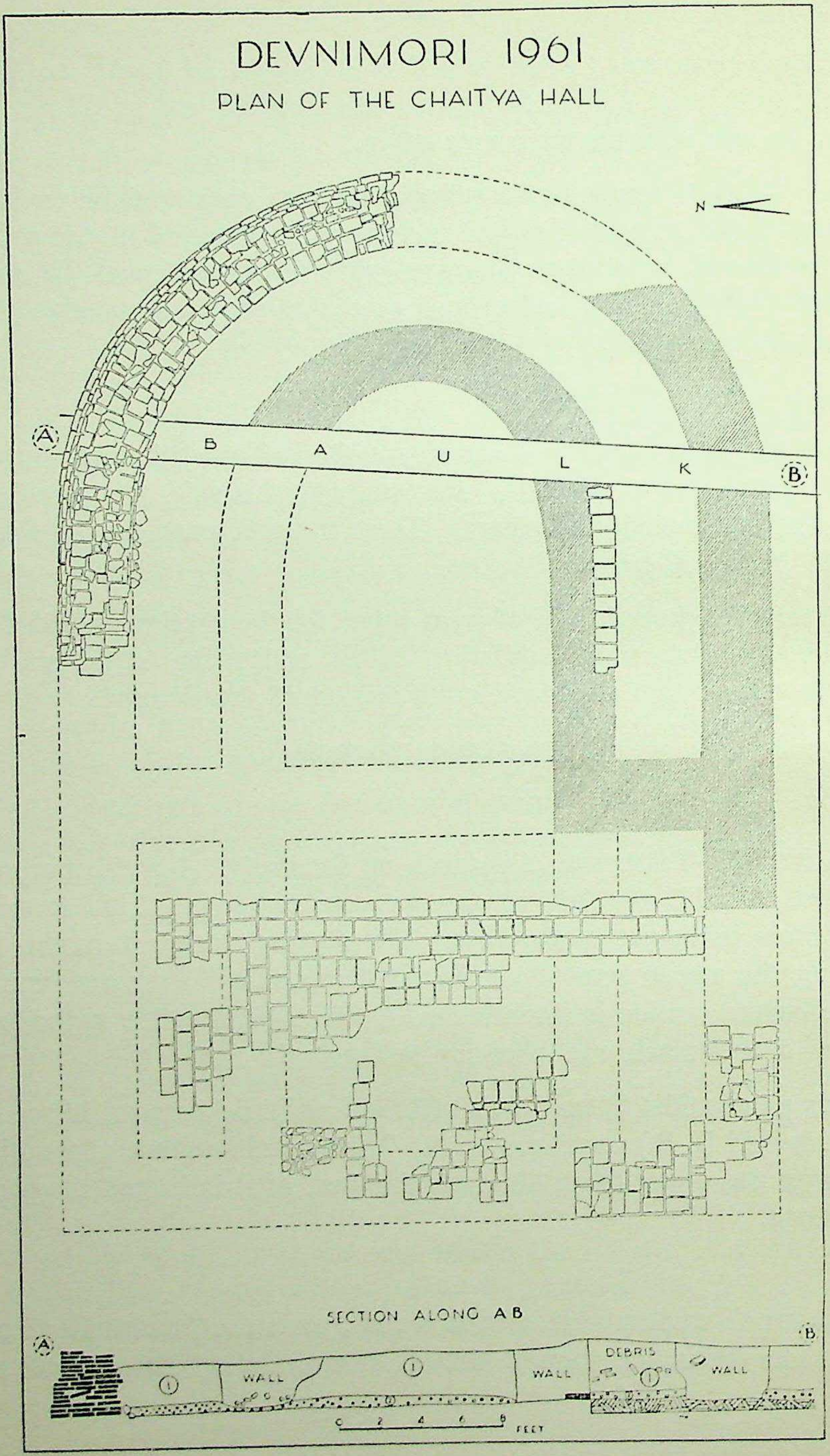

DEVNIMORI 1961
PLAN OF THE CHAITYA HALL
N
A
B A U L K
B
SECTION ALONG AB
A
B
WALL
WALL
WALL
WALL
DEBRIS
①
0 2 4 6 8
FEET

Fig. 5

The stratigraphy here revealed that this structure was built on natural black clay, and its foundation secured by quartzite boulders of varying sizes.

Inside the structure, the remains of a circular stupa were traced on the ground. It was completely destroyed and revealed its existence only in the section, facing west. (Fig. 5 & Pl. III).

Grid II

After the identification of Bhoja-Raja-No-Tekro as a stupa, the trenches were again laid on grid pattern. They were named as A,B,C,D,E,F, on the north-south axis and A1,A2,A3,A4,A5,A6,A7 etc. on east-west axis, as was the case with Grid I.

The stupa was then cleared (Pl. I C) from all sides for the study of the architectural details. On the east and north, however, trenches were excavated upto the natural earth.

Cutting of the Stupa

After clearing the stupa and studying the outer details, north-eastern quadrant of the stupa was opened for the study of its inner construction in 1961-62 (Pl. II A.). This did not yield much useful information, so in 1962-63 a different method was followed. It was presumed from the available evidence from other sites that the relic casket was generally laid in the centre of the stupa. So a trench should be laid on and around this centre, and dug up to the natural earth.

Trench IV

With this hypothesis, a trench was laid covering the centre of the stupa. Initially its dimensions were 17′×17′ and later on it was extended to about 8′ to the south. This shaft was excavated on the following lines:

As the main purpose of this trench was to dig through a building, it was decided to remove the bricks course by course. For this work crow-bars were used (Pl. IV A). They were inserted between the joints of the bricks and as soon as these bricks, were loosened they were removed. After clearing one course underlying mud-mortar was scraped clean, so as to reveal the underlying course of bricks.

This method proved to be very useful because by this it was possible to maintain a perfect record and no damage was done to any antiquity that was being excavated.

When the whole structure was removed the underlying strata were excavated by the traditional pick-axe.

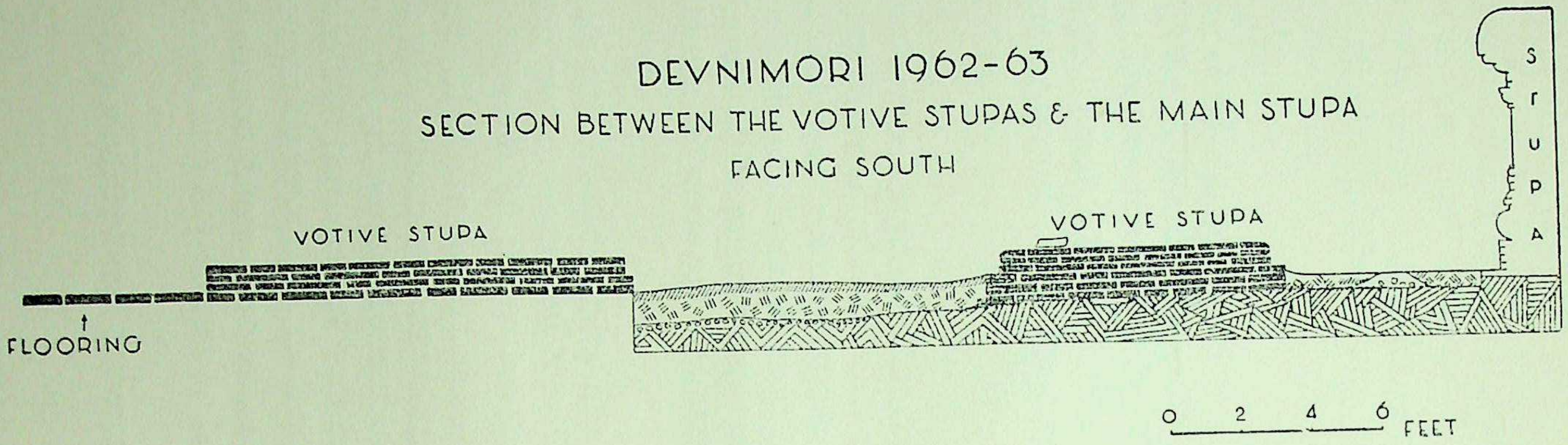

DEVNIMORI 1962-63
SECTION BETWEEN THE VOTIVE STUPAS & THE MAIN STUPA
FACING SOUTH
VOTIVE STUPA
VOTIVE STUPA
STUPA
FLOORING
0
2
4
6
FEET

Fig. 6

This shaft was excavated to a depth of 45′ from the top. It clearly showed that the stupa was built on sloping natural earth of black colour. It was levelled by yellow kankary earth, known as ‘ soft murrum ’. Over this levelled area, the stupa was erected.

West of Bhoja-Raja-No-Tekro

On the western side of the Bhoja-Raja-No-Tekro, excavations were carried on to study that area. It revealed that a few associated structures lay here. All of them were covered up by yellow natural earth, which was overlying a layer full of brick-bats, pottery etc. The structures were observed, below this layer.

On plan they seemed to belong to one period, but a narrow trench running east-west and joining the main stupa, votive stupa No. 1 and No. 2 was excavated (Fig. 6).

This trench showed that the main stupa and votive stupa No. 1 were constructed on the natural earth, but the pavement was built on a thin filling above the natural black earth. Over this pavement votive stupa No. 2 was constructed.

Trench V

A trench 16′×8′ was excavated in 1962-63 to study the extent of the brick pavement, in the central open space between Vihara 1 and the stupa. This trench revealed that the brick-pavement extended upto this part. Here the stratigraphic position was similar to the one noted above.

Trench VI

This trench 24′×8′ was also excavated to study the protecting wall on the western side. The wall was traced in this trench, showing thereby that the protecting wall was built on the north and west of all the structures.

Trench VII—Vihara II—(Fig. 7)

All these monuments proved that a large Sangharama existed here. The remains of walls were seen at a number of places, suggesting the existence of many more structures. It was not possible to open up this extensive area, but it was essential to note the nature of some other monuments. For this purpose a trench was laid on the mound lying in the field of “ Kodar Vechat ”, at a distance of some 150 meters to the east of Bhoja-Raja-No-Tekro.

DEVNIMORI 1962-63

PLAN OF VIHARA 2

(S.W. CORNER)

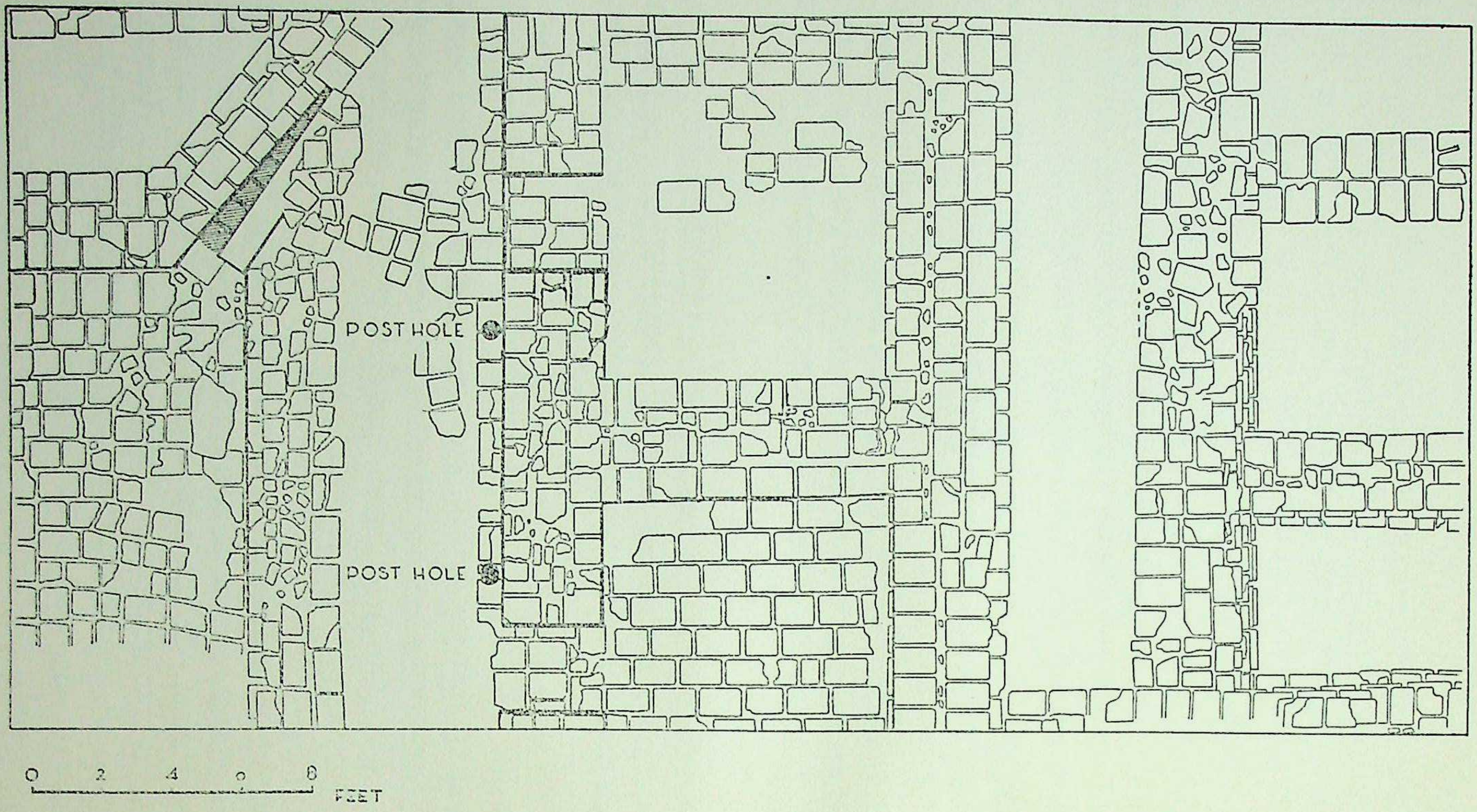

POST HOLE
POST HOLE
0
2
4
6
8
FEET

Fig. 7

The trench (VII) 40′×20′ was laid in the east-west alignment on the western side of this mound. This trench covered the lower ground, the higher rim of the mound and the central depression.

It revealed the existence of a small vihara of the *Chatushala* type, built upon the black natural earth.

The trench further suggested that the adjoining field had archaeological debris of about 3′ over the original black natural earth. As a result of this, it could be inferred that this occupation debris was developed by other structures that might have existed here.

The trenches thus revealed the existence of a large settlement with viharas, stupas, chaitya, protecting wall, brick pavements etc. The vertical stratigraphy of these monuments was studied at the following points for tracing their history.

(1) The southern and eastern side of the Vihara I, section facing west.
(2) The north-western side of Vihara I.
(3) Eastern side of the Vihara I inner side.
(4) The western side from the stupa.
(5) Trench on Vihara II.
(6) The trench on the stupa.

The details of this stratigraphic studies are noted below:

Stratigraphy of the south-western corner of Vihara I (Fig. 9).

On the south-western side of the Vihara I following stratigraphy clearly indicated that the Phase III was built on natural black earth, (layer 4). This resulted in laying the red brick powder on the natural earth. Above the red brick powder was a thick ashy layer representing the period of occupation (layer 3). This was overlaid by the debris of the fallen structure (layer 2). Over this debris was a loose layer of brick-bats, which were thrown out by those who dug for the bricks (layer 1). This layer was covered up by modern humus layer.

3746

Here the stratigraphy indicated that this site was occupied at one period only, and was abandoned. This side therefore, gives the stratigraphy of the occupation of the vihara after phase III of building. This lacuna however is filled up by the stratigraphy on the north-western side as well as the eastern side of the vihara.

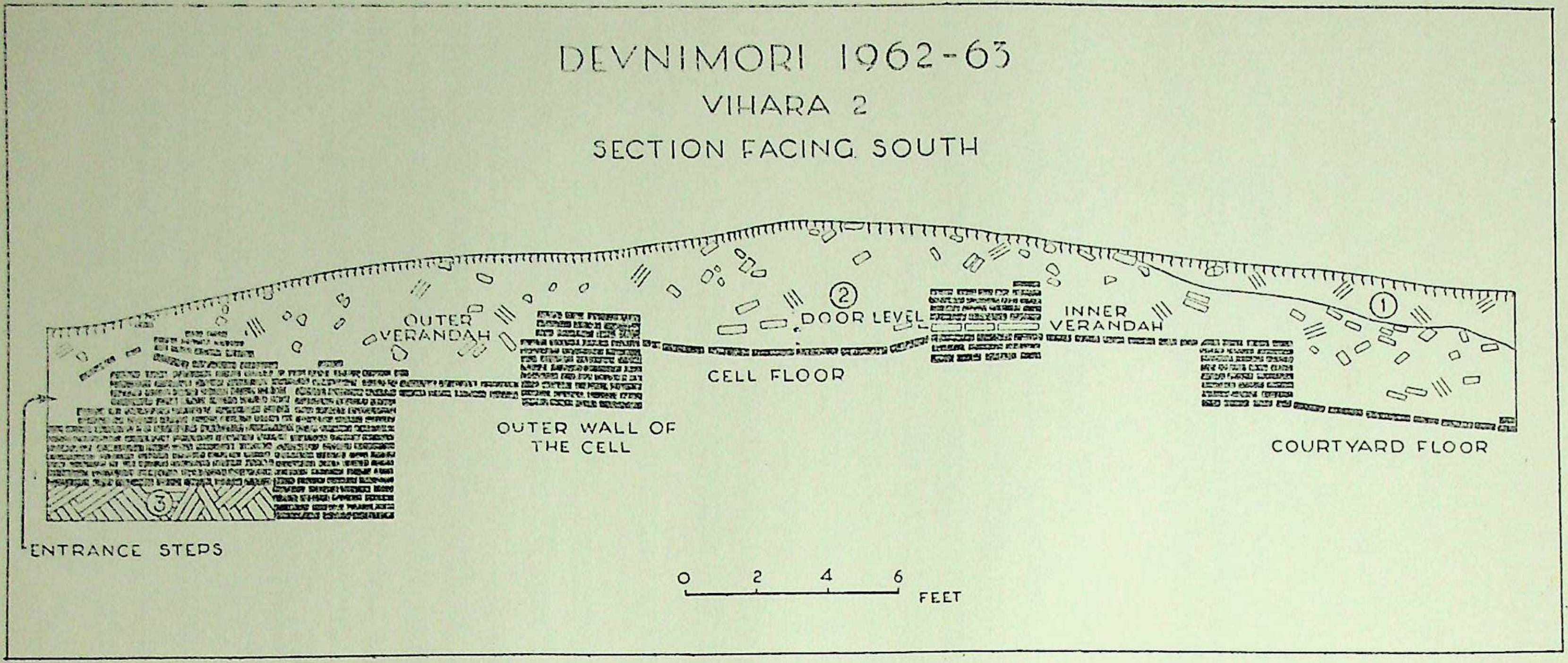

DEVNIMORI 1962-63
VIHARA 2
SECTION FACING SOUTH
OUTER VERANDAH
② DOOR LEVEL
INNER VERANDAH
①
CELL FLOOR
OUTER WALL OF THE CELL
COURTYARD FLOOR
③
ENTRANCE STEPS
0
2
4
6
FEET

Fig. 8

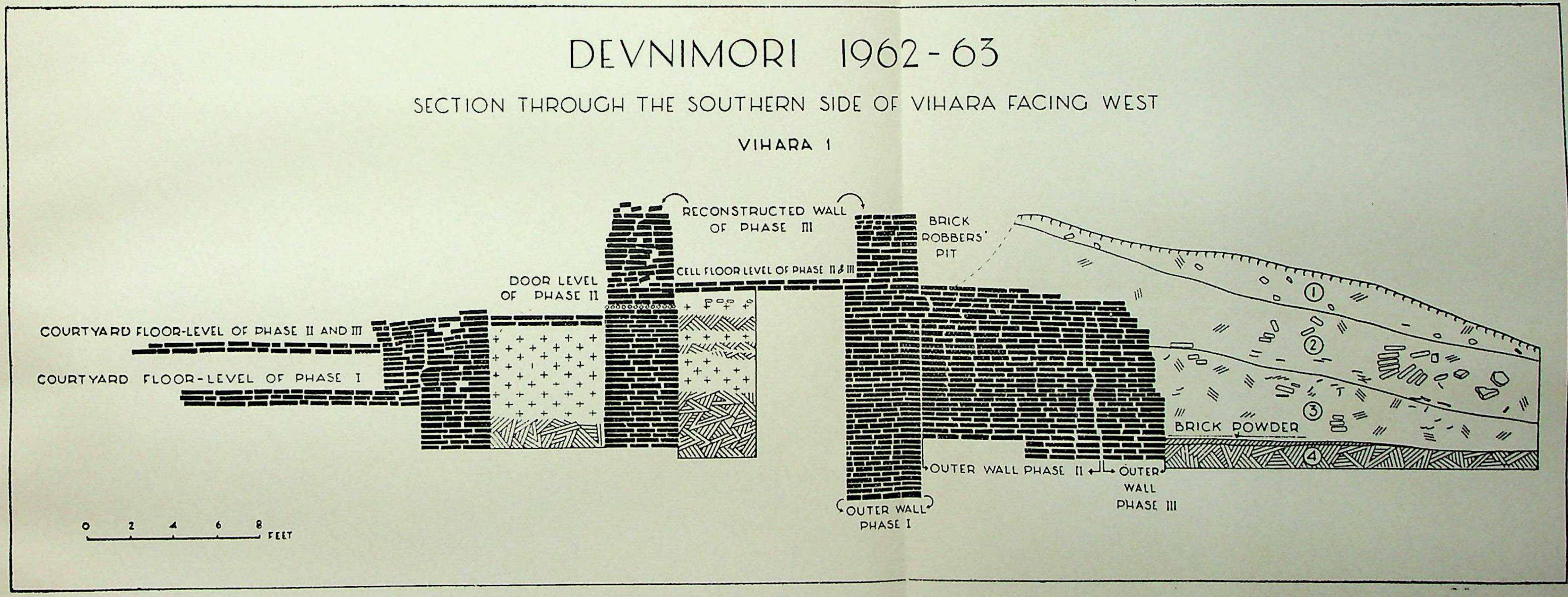

DEVNIMORI 1962-63
SECTION THROUGH THE SOUTHERN SIDE OF VIHARA FACING WEST
VIHARA 1
RECONSTRUCTED WALL OF PHASE III
BRICK ROBBERS' PIT
CELL FLOOR LEVEL OF PHASE II & III
DOOR LEVEL OF PHASE II
COURTYARD FLOOR-LEVEL OF PHASE II AND III
COURTYARD FLOOR-LEVEL OF PHASE I
①
②
③
④
BRICK POWDER
OUTER WALL PHASE II
OUTER WALL PHASE III
OUTER WALL PHASE I
0 2 4 6 8 FEET

Fig. 9

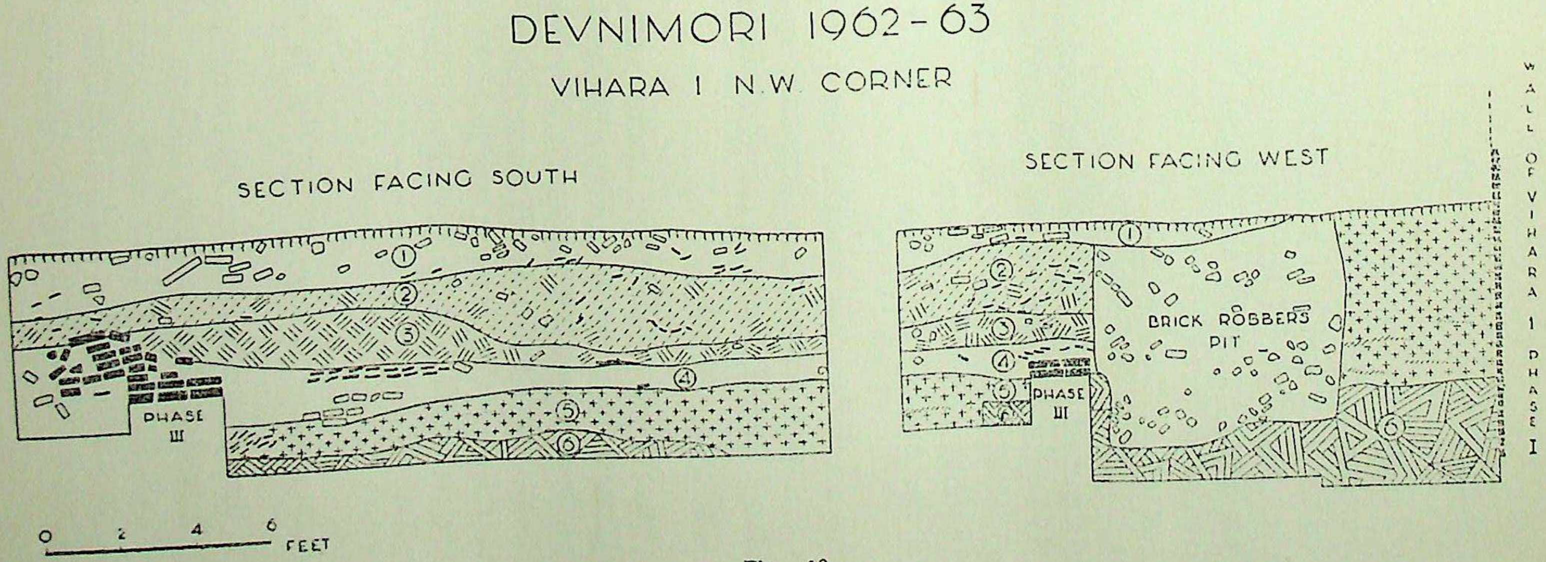

DEVNIMORI 1962-63
VIHARA I N.W. CORNER
SECTION FACING SOUTH
SECTION FACING WEST
WALL OF VIHARA 1 PHASE I
BRICK ROBBERS PIT
PHASE III
PHASE III
①
②
③
④
⑤
⑥
0
2
4
6
FEET

Fig. 10

Stratigraphy on the North-western corner of Vihara I

Unfortunately, a large part on this side was disturbed by the trenches laid down by the brick-removers. Beyond this disturbance, the stratigraphy revealed that initially the structure was raised on natural black earth, on which nine courses of bricks were laid as foundation of the main structure. Over this foundation, courses of bricks were erected to bring the structure to the plinth level. Near this wall parts of a verandah were observed. They were represented by 14 courses wall which was 4′-5″ long and 4′-3″ broad.

To the north of the main wall is the yellow rammed earth filling for raising the verandah of Phase II (Fig. 10). Most of this verandah as well as the verandah of Phase I were removed in the present century. It is indicated by the discovery of a modern coin from the pit of the brick-removers. This is also supported by the local gentry, who indicated the places from where the bricks were removed.

The section facing south, however, revealed that the lowest stratum (layer 6), was the black clay. It was covered by yellow kankary earth (layer 5) which could be equated to the filling of Phase II, that is also seen in the section facing west.

On this filling, a layer of greyish colour with pottery etc., was observed. When this layer (no 4) was formed the extension of Phase III, on the outer verandah of the vihar seem to have been carried out. It was overlaid by layer 3 of compact brown earth containing brick-bats and roof-tiles. It seems to be a phase of destruction of the vihara. After this destruction, layer 2 was formed. It consisted of pottery and other habitation debris. This was the last stage of habitation. It was covered up by layer 1 composed of brick-bats etc. It was covered up by modern surface.

Stratigraphy of the Eastern side of Vihara I (Fig. 9. Pl. IV B).

As this side of the vihara was more damaged trenches were sunk to the natural earth. These trenches revealed uniform stratigraphy indicating that the vihara was built on the natural black earth. Over it on yellow kankary earth, thick flooring of the court-yard was laid. This flooring was covered up by yellow earth similar to the one below the flooring. Over this layer again the brick flooring was laid down. This flooring was covered up by brick bats and black clay developed probably by water logging.

Conclusion

This study of the stratigraphy shows that the vihara had undergone the following Phases of construction and re-construction:

Phase I : Building of the vihara and outer verandah, occupation of the vihara.
Phase II : Building of the second and possibly the third phase of the outer verandah, the vihara was occupied.
Phase III : Destruction of the vihara after phase III.
Phase IV : Repairs of the vihara and its occupation.
Phase V : Last destruction of the vihara. Abandonment of the site.

Stratigraphy to the west of the stupa

The stratigraphy to the west of the stupa clearly revealed that the stupa, the votive stupa 1, chaitya and the brick pavement to its west were built over the natural black earth.

Over the brick pavement however the votive stupa No. 2 was built.

This was covered up by brickbats and brown earth, representing a layer of destruction. Over this layer, lay the fine natural earth and upper land surface.

From this study it will be clear that the Mahastupa, votive stupas No. 1, 3, 4. the chaitya and projecting wall and the brick pavement were on the same layer and hence, they seem to belong to a single phase of construction, whereas the votive stupa No. 2 is a later addition. After they were abandoned, it appears, they were never repaired.

Absence of stratigraphy between Vihara I and the Stupa

The northern end of the Vihara I was already dug for the bricks, hence, the layers here were destroyed. A country road, passing by this site, had damaged the intervening layers, so the conditions were not favourable to study the stratigraphy between the stupa, the chaitya and Vihara I.

Vihara II. (Fig. 8)

Vihara II revealed the following history. It was also built on black earth. After it was occupied for sometime, as noted by occupation debris, a few walls were added to it, on the west. These walls were covered by occupation debris. This, in trun, was overlaid by brickbats etc., which suggests the destruction of this vihara.

Thus the following Phases of this vihara could be stratigraphically shown—

Phase I—Building of the Vihara II.
Phase II—Additions on the Vihara II.
Phase III—Destruction of the Vihara II.

Stupa

The inner construction of the stupa was studied in 1962-63. Stratigraphic details of this dig are noted in the Figs. 11 and 15. From these figures it will be clearly seen that the stupa was raised at one time only, and hence, the stratigraphy resolves itself into the elevation of the stupa. The details of its construction are noted in Chapter IV dealiug with architecture.

STUPA AT DEVNIMORI

DETAILS OF BRICK-COURSES AND ANTIQUITIES

NO. OF COURSES	ALIGNMENT	SIZE OF BRICKS	LEVELS FROM BASE OF STUPA	ANTIQUITIES	REMARKS
140					
139					
138					COURSES WITH VOLUTES
137					
136					
135					
134					
133					
132					
131					
130					
129		17" × 11"			
128		" "			
127		" "			
126		17×11" – 17½ × 11			
125		17 × 11			
124		" "			
123		17×11 – 19×13			
122		17×11 – 16½×11	32·96		BUDDHA IMAGE
121		17 × 11			
120		" "			
119		17×11 – 16½×10½			
118		17 × 11			
117		" "			
116		" "			
115		" "			
114		" "	30·96		
113		17×11 – 16½ × 11			
112		17 × 11			
111		" "			
110		" "			
109		17×11 – 17½ × 11			
108		17 × 11			
107		" "			
106		17×11 – 16½×10½			
105		17 × 11			
104		" "			
103		" "			
102		17×10 – 17 × 11			
101		17×10 – 17 × 11			
100		17 × 11			
99		" "			
98		" "			
97		" "			
96		" "	26·03		SEALING COURSE FOR CASKET
95		" "	25·80		CASKET IN EARTHEN POT
94		17×11 – 16½ × 11	25·54	CASKET 2	
93		" "	25·32		
92		" "	25·07		
91	E. W.	17×11 – 16½ × 11	24·79		BASE OF THE DRUM
90	E. W.	17×11 – 16½×10			
89	E.W. N.S.	17 × 11			
88	E. W.	17×11 – 19×13			
87	N. S.	17 × 11			
86	E. W.	" "			
85	N. S.	" "			
84	E.W. N.S.	19" × 13"			
83	E. W.	19" × 13"			
82	E. W.	17" × 12"			
81	N. S.	17 × 11			
80	N. S.	" "			
79	E. W.	" "			
78	N. S.	" "			
77	N.S. E.S.	17" × 11"	20·62		HOARD OF ARCHES IN EASTERN PART OF TRENCH
76	" "	" "			
75	" "	" "			
74	" "	" "	20·05		
73	N.S. E.W.	" "			
72	E. W.	" "			
71	E. W.	17" × 11½"			
70	N. S.	" "			
69	E. W.	" "			
68	E. W.	" "			
67	N.S. E.W.	" "			
66	N. S.	" "			
65	N. S.	" "			
64	E. W.	" "		T.C. LION HEAD	
63	N. S.	15×10 - 16×10½ - 17×11½			
62	E. W.	17 × 11			DECORATIVE T.C. JAMBS OF BIGGER ARCHES IN WESTERN HALF OF TRENCH
61	N. S.	" "			
60	N. S.	17" × 11½"			
59	E. W.	" "	16·12		
58	N. S.	" "			
57	N. S.	" "			
56	E.W. N.S.	" "			
55	E. W.	" "			
54	N. S.	" "			
53	N. S.	" "			
52	E.W. N.S.	" "			
51	E.W. N.S.	17" × 11½"			SEALING COURSE FOR INNER STRUCTURE
50	N. S.	" "	13·26		DRY BRICK STRUCTURE
49	N. S.	" "	13·01		
48	E.W. N.S.	" "			
47	N. S.	" "			
46	E. W.	" "			
45	E.W. N.S.	16×10½ – 17×11½			
44	E W	17" × 11½"			
43	E.W. N.S.	17" × 11½"			
42	" "	17" × 11"			
41	" "	" × "			
40	" "	17 × 11½ – 17 × 11			
39	" "	16 × 10½ – 17 × 11			
38	" "	17" × 11"			
37	" "	" "			
36	" "	" "			
35	E. W.	15 × 10 – 16½ × 10½	9·30	GLOBULAR POT	WITH EIGHT KSHATRAPA COINS, GOLD FOIL AND FRAGMENTS OF BLUE GLASS BOTTLE
34	E. W.				
33	N.S. E.W.				
32	E. W.				
31	N. S.				
30	N. S.				
29	N.S. E.W.	16" × 10"			
28	E. W.	16" × 10"			
27	N. S.	16" × 10"			
26	E. W.	16" × 10"			
25	N. S.	16" × 10"			
24	E. W.	16" × 10"			
23	N. S.	" "			SEALING LAYER OF IMAGES
22	E. W.	" "			
21	N. S.	" "			EIGHT BUDDHA IMAGES
20	E. W.	" "	5·39		
19	N. S.	" "			
18	E. W.	" "			
17	N. S.	16×10 – 16½×10½			
16	E. W.	16" × 10"			
15	N. S.	" "			
14	E. W.	" "			
13	E. W.	" "	3·42		
12	N. S.	" "			
11	E. W.	" "			OBLIQUE ALIGNMENT
10	N.E. S.W.	" "			FILLING OF BRICK-POWDER AND CLAY
9	E.W. N.S.	15×10 – 16×10½	2·40		
8	E.W. N.S.	16" × 11½"			BASE OF DECORATIVE ARCH PIECES
7	N. S.	16 × 10½	1·91		
6	E.W. N.S.	" × "	1·72		
5	N. S.	16 × 10"			
4	E. W.	16 × 10½"			
3	N.S. E.W.	16 × 10"			
2	N. S.	" "			
1	N. S.	" "	0·00		BASE OF STUPA
			-2·07	CASKET 1	

Fig. 11

walls
debri
of th

Stup

detai
clear
resol
note

CHAPTER III

CHRONOLOGY OF THE SITE

Fortunately, the chronology of the settlement could be fixed up by the evidence offered by the pottery, coins, inscriptions and stratigraphy.

Pottery

The chief wares that help to decide the chronology of the monuments are the Roman Amphorae, Polished Red Ware, Painted Ware and Stamped Ware.

The amphorae were imported from the Roman World in India in the early centuries of the Christian Era.[1] This Ware, therefore, suggests that the site was occupied in this period. The Painted Ware was similarly discovered at Vadnagar[2] in the early centuries of Christian Era. The Stamped Ware was also noted to occur in this early period. The other interesting ware is the Red Polished Ware which has been discovered from many sites in India. From the excavations carried out at Baroda,[3] Timbarva,[4] Vadnagar,[5] Maheshwar,[6] and other sites, it has been found in the layers dated to the early centuries of Christian Era, on the evidence of the associated finds. These wares occurring in the early centuries of the Christian Era and discovered from the site are a pointer, suggesting that this site could also be dated to this period.

Coins

The coins discovered from this site point out that a majority of them belong to the Kshatrapa period. The other varieties are the so-called Valabhi, and the Indo-Sassanian coins. The Gupta coins are absent. The coins confirm the pottery evidence, and further suggest that the beginning of the occupation at this site might be dated to the period of the Kshatrapas, that is from about the second to fourth century A.D.

---

[1] WHEELER, SIR R.E.M., Arikamedu, *Ancient India*, Vol. II, p. 22 ff.

[2] SUBBARAO, B. & MEHTA, R. N., Excavations at Vadnagar, *Journal of the M. S. University of Baroda*, Vol. IV, No. 1, p. 25 ff.

[3] SUBBARAO, B., *Baroda through the Ages*, p. 35-36.
DESAI,, M. D., Some Roman Antiquities from Baroda, *Bulletin of the Baroda Museum*, Vol. VII, 1951.

[4] MEHTA, R. N., *Excavations at Timbarva*, p. 15.

[5] SUBBARAO, B. & MEHTA, R. N., *Op. cit.*

[6] SANKALIA H. D., & Others. *The Excavations at Maheswar and Navda Toli*, 1952-53, p. 159 ff.

Inscriptions

This evidence is further corroborated by the casket inscription and stratigraphy of the Mahastupa. From this stupa an inscribed relic casket was obtained. One of its inscriptions clearly mentions that this Mahastupa was built in the year 127 of the reckoning of the Kathika rulers, during the reign of Rudrasena.

Unfortunately, this era is not known from previous records, so its calculation raises a number of problems. Four Kshatrapa rulers had the name Rudrasena which further complicates the issue.

The confusion is cleared to some extent by the stratigraphical considerations. The study of the stupa suggests that the core was never disturbed after it was built. Below the relic casket a pot containing eight silver coins was obtained. The last ruler of this hoard was Vishvasena, whose rule came to an end after 305 A.D.

This discovery is extremely significant because the year 127 of the Kathika Era most probably should come after 305 A.D. and not before.[1] Rudrasena should be identified with either Rudrasena III or IV. But the longer rule of Rudrasena III in the third quarter of the fourth century A.D. suggests that probably the ruler of the inscription should be identified as Rudrasena III and the beginning of the Kathika Era should be placed in the third century A.D. In this century Kataccuri Era was also established, so it is tempting to identify the Kathika Era with that of the Kataccuris. This point should be left open till further proofs are obtained. However, provisionally the Kathika Era be considered equivalent to the Kataccuri Era. So Kathika I27 = 375A.D. which would be the latest year for laying the casket. The construction of the stupa thus, is not earlier than 305 A.D. and not later than

---

[1] When the casket was obtained and the inscription was read it was felt that Rudrasena should be identified as Rudrasena I, whose Gadha inscription is dated in the year 126. The Kshatrapas used the Era beginning from 78 A.D. The calculations of the year 127 = 205 was in general agreement with the time of Rudrasena I. So this tentative identification was given in " A Preliminary Note on the Excavations of Devni Mori Stupa 1962-63 " in the *J.O.I.* XII, No. 2, p. 172 ff. But the further work on the stupa does not support this identification. So it is revised here in the light of the stratigraphical findings, that became available later for details, see. Mehta, R. N., *J.O.I.* XIV, Nos. 3, 4, P. 410 ff.

375 A.D. Between this margin if the gap is still narrowed down one can assume that the whole construction and planning of the stupa might have taken place during the reign of Rudrasena III *i.e.* in the third quarter of the fourth century A.D. This conclusion is in conformity with the other archaeological data.

If the Mahastupa was planned and constructed as noted above in the third quarter of the fourth century A.D., the Mahavihara should precede it as can be seen from the inscription. But how many years before the construction of the Stupa, the vihara was constructed is a moot point. Stratigraphically, the earliest phase of the vihara and the stupa are on the natural black earth, so the stratigraphy does not help to find out the time gap. Here it seems that the first Buddhist settlement might have begun by establishing a large vihara. This vihara, therefore, should have been built prior to the construction of the stupa, that is, before the third quarter of the fourth century. The first phase of the Mahavihara, therefore, should be assigned to a period before the construction of the Mahastupa. The Mahavihara was extensively repaired at a later date. There should be some time gap between the initial construction of the first phase of the Mahavihara and its later repairs. This massive structure, it may be assumed, must have been in existence for a couple of decades before the third quarter of the fourth century A.D. This evidence, therefore, suggests that the Maha Vihara was initially constructed probably in the century preceding the third quarter of the 4th century A.D.

The second phase of this vihara should, however, be contemporary to the great building activity associated with the construction of Maha Stupa. Alongwith it the two votive stupas, the chaitya and the various platforms were also built. This period probably witnessed the greatest building activity on this site. During this period the second and third phases of the outer verandah of the vihara were constructed. In the n.w. trench this extension overlies a habitation debris of the vihara, suggesting thereby that it was built at a later stage than the first Phase. The room on the south-east was also built at this time. The inner courtyard of the vihara was, probably, raised at this time, and possibly the steps on the s.w. corner might have been built.

After this major phase of building this site seems to have been stabilised but minor repairs and reconstructions on various parts of the Mahastupa and Mahavihara as well as the building of Vihara II were continuing.

The stupa seems to have been repaired at many times.

This is natural as the rain and wind would destroy many parts of this mud-cemented monument, which is open to the sky. The bases of pillars in the southern niches (Pl. IX B) had undergone a change of side, roll-moulding above the Pradakshina Patha had collapsed and were repaired.

One of these repairs, could, however, be successfully dated. From the mud cement of the repaired part, a coin of Sarvabhattaraka was obtained, suggesting thereby that this repair was carried out after the coin was struck, probably in the 6th century A.D. The walls on the south-west were also built at a later date as can be noted by the fallen debris below its construction, but it could not be precisely dated.

It was after the period of the greatest building activity that at least one votive stupa was built. Around the square structure some constructions were also undertaken. Probably the Vihara II was also built after this date. It was at a greater distance from the stupa and Vihara I. It is a much smaller copy of the latter. The constructional details, the use of door-jamb (?) for lining the drain, etc. suggest that it is a comparatively later construction. It also started its activity on the natural black earth, and was repaired at a later date.

Alongwith all this activity, the walls of the Mahavihara were also occasionally repaired. The evidence from north-western trench suggests that after it was destroyed (the layers of roof tiles and brickbats layer 2) parts of it were never repaired, but the evidence from room 22 suggests that its floor was repaired by the use of roof tiles and it was used for smelting something as could be judged by the remains of a small furnace. This was probably the last activity in the building before it was abandoned.

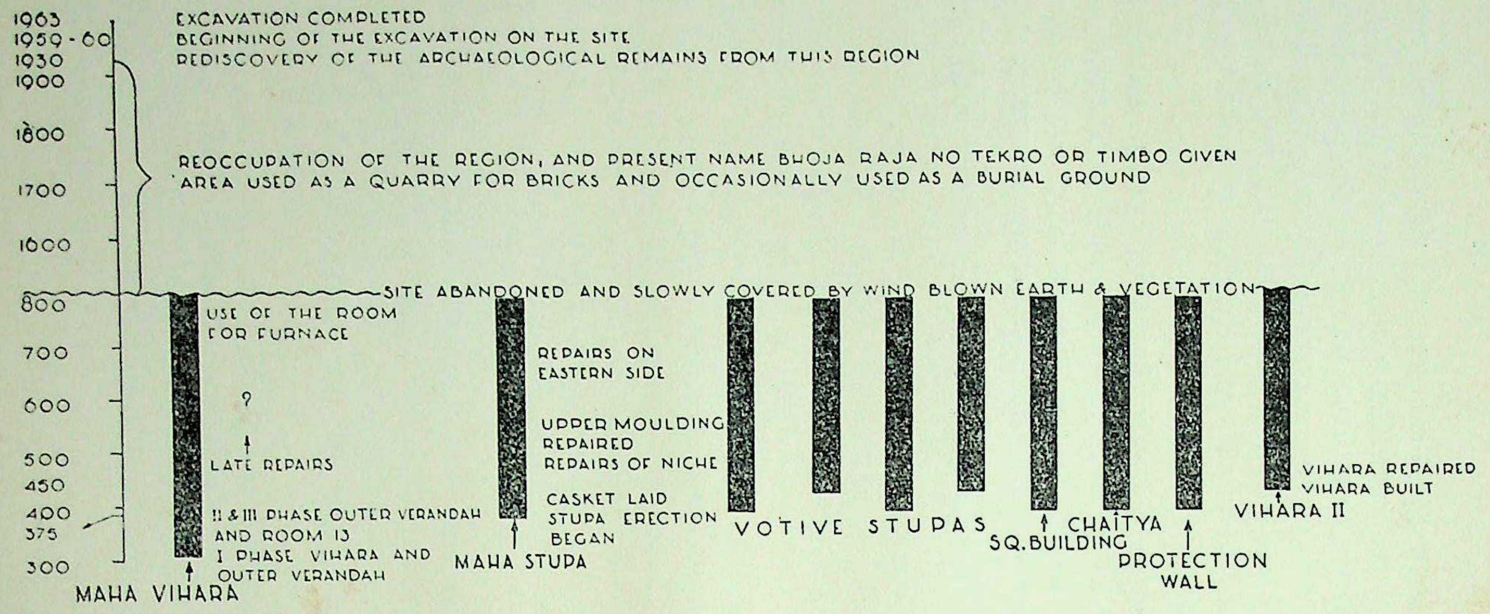
From the Mahavihara small images of divinities like Vishnu, Mahishamardini (Pl. XXIV E) have been discovered. They suggest that either they were the deities of converts of Buddhism or the Buddhists were slowly being influenced by these cults of their neighbours. The third possibility that could be noted is that they were brought for study or some such purpose.

None of these antiquities are stylistically later than the seventh or eighth century A.D. It could, therefore, be assumed that this flourishing settlement was coming to an end in about 7th or 8th century A.D. The vihara was tottering and the parts that were fallen were given up to nature, which covered up this monument by the wind blown earth and vegetation.

If the vihara was not occupied, the stupa was also neglected. Its sides began collapsing, the niches were filled with natural earth. Images of Buddha, the arches and other decorations were slowly tumbling down and being covered up by nature. The same fate seems to have overcome the whole site. This process was completed and its memory was also lost, when the new people arrived in this area. These were the Rajputs, Thakardas and the Bhils who seem to have occupied this area after the 15th century.

The general revival of architectural work in this area in the 15th and 16th century has left its traces in the large temple at Shamalaji, and other monuments. Many of these inhabitants used the old bricks for variety of constructions. This helped the archaeologists to discover these monuments.

The accompanying chart details the activity on this settlement (Fig. 12).

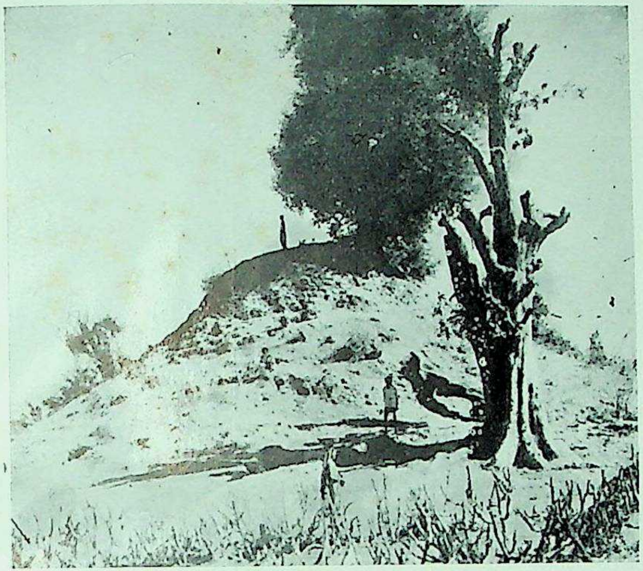


CHRONOLOGY OF THE MONUMENTS AT DEVNIMORI

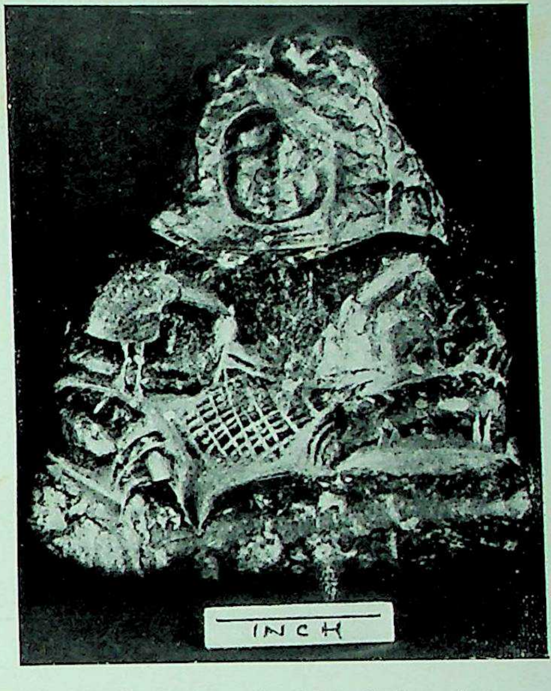
Fig. 12

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

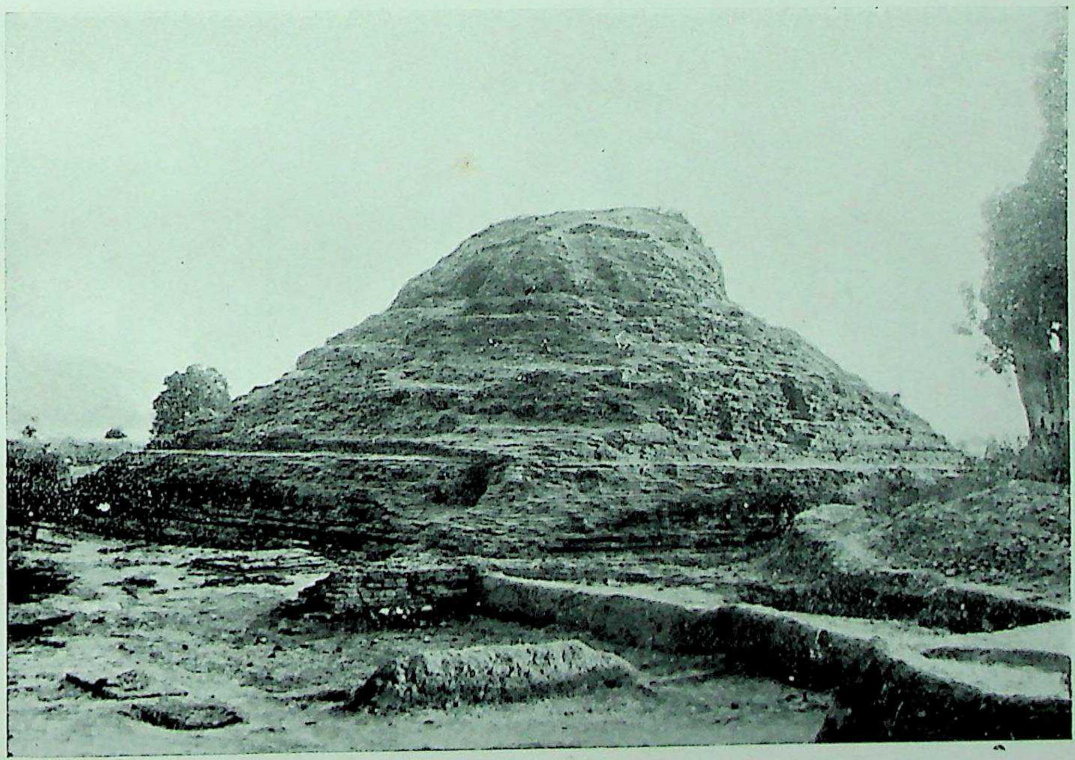
PLATE I



A. Bhoja Raja No Tekro or Mahastupa
(Before excavation)

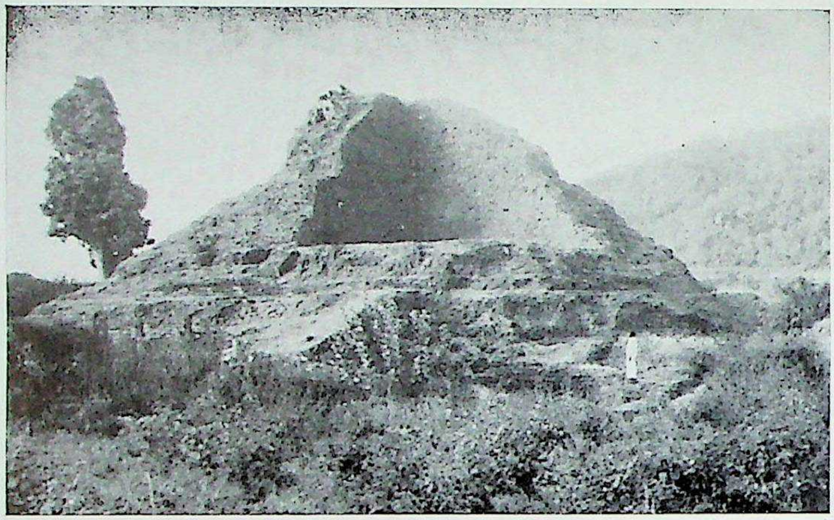


B. Jambhala from the field of Amarsimha

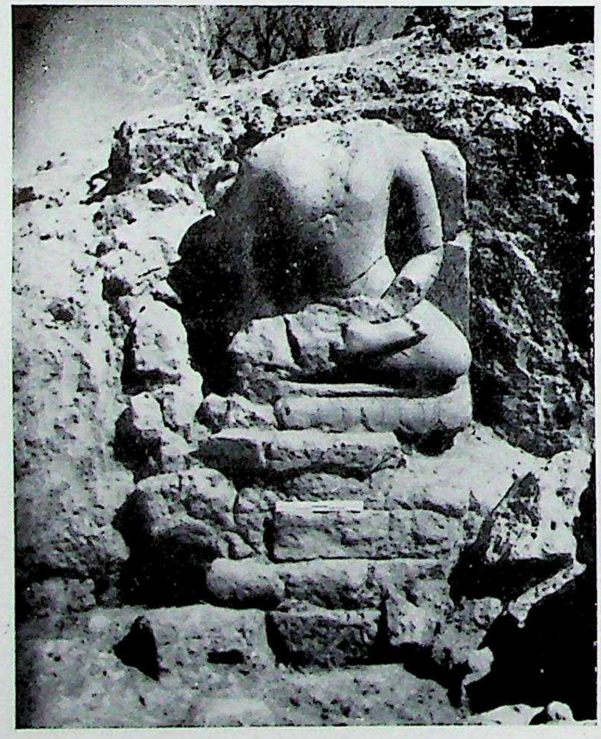


C. Bhoja Raja No Tekro or Mahastupa (After excavation)

PLATE II

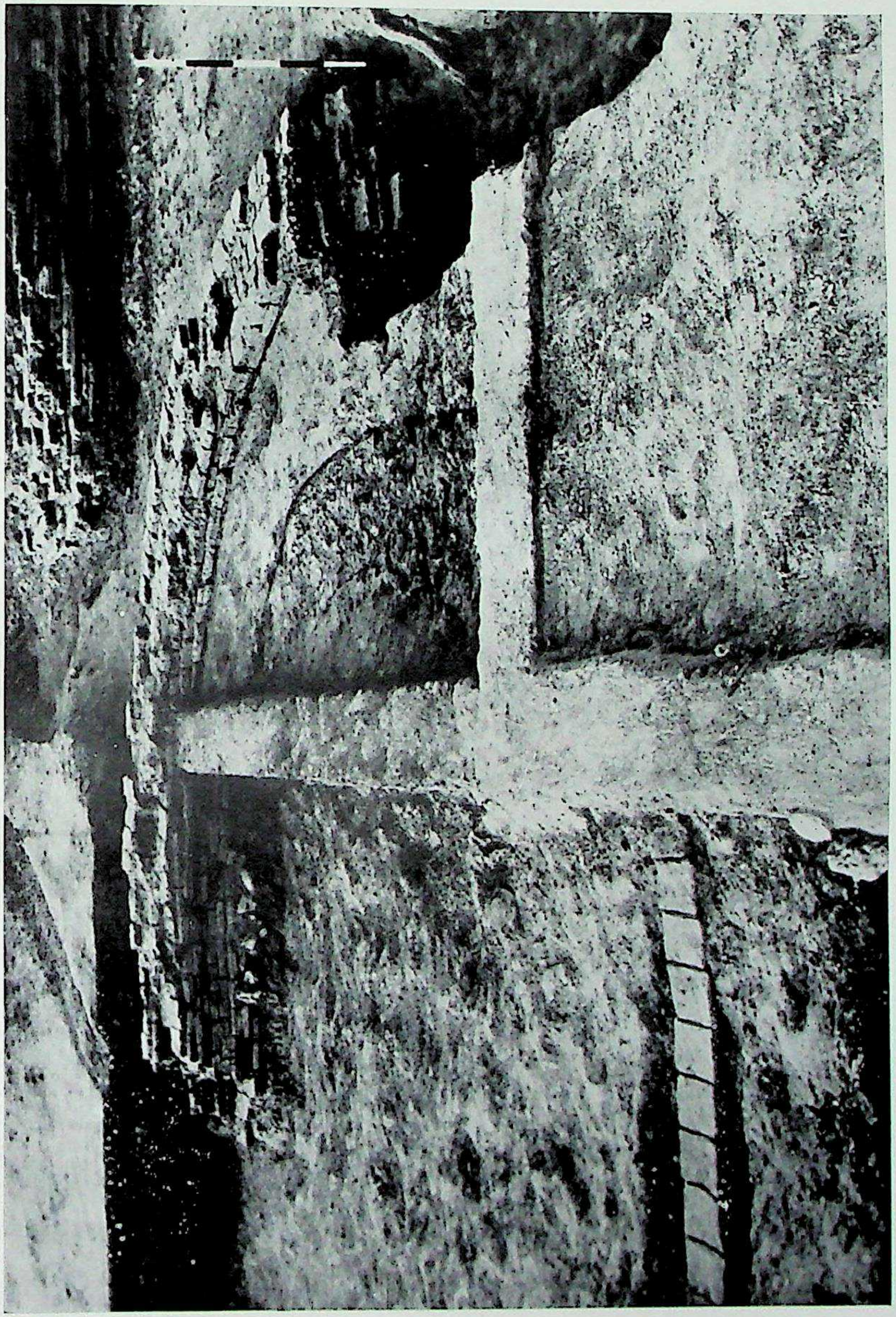


A. North-Eastern cutting of Mahastupa



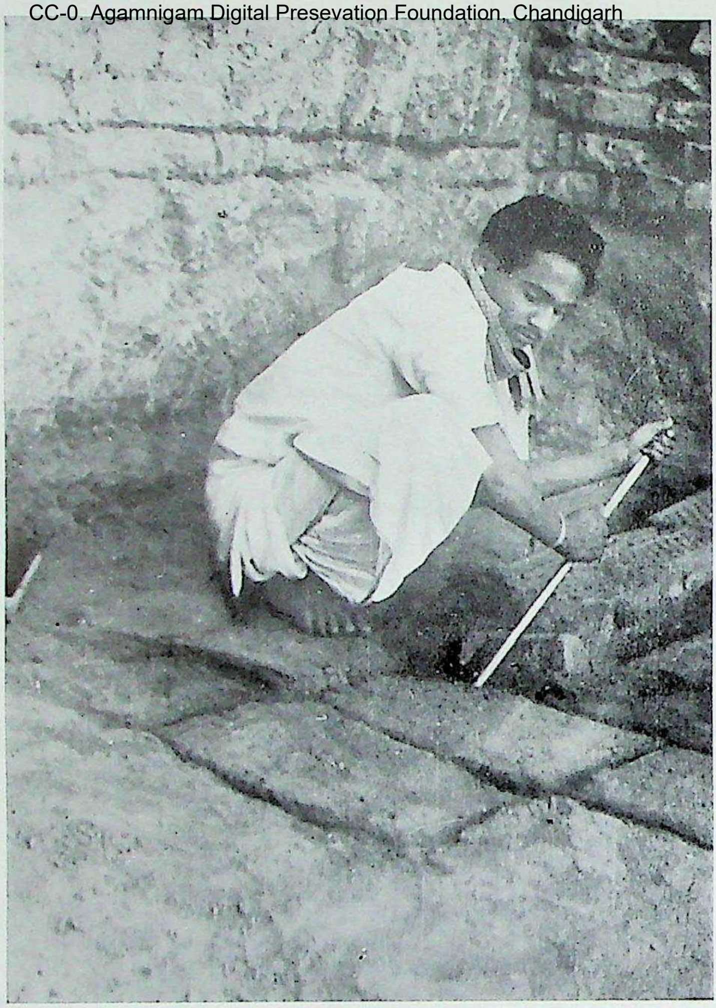
B. Dhyani Buddha *in situ* on Mahastupa

PLATE III

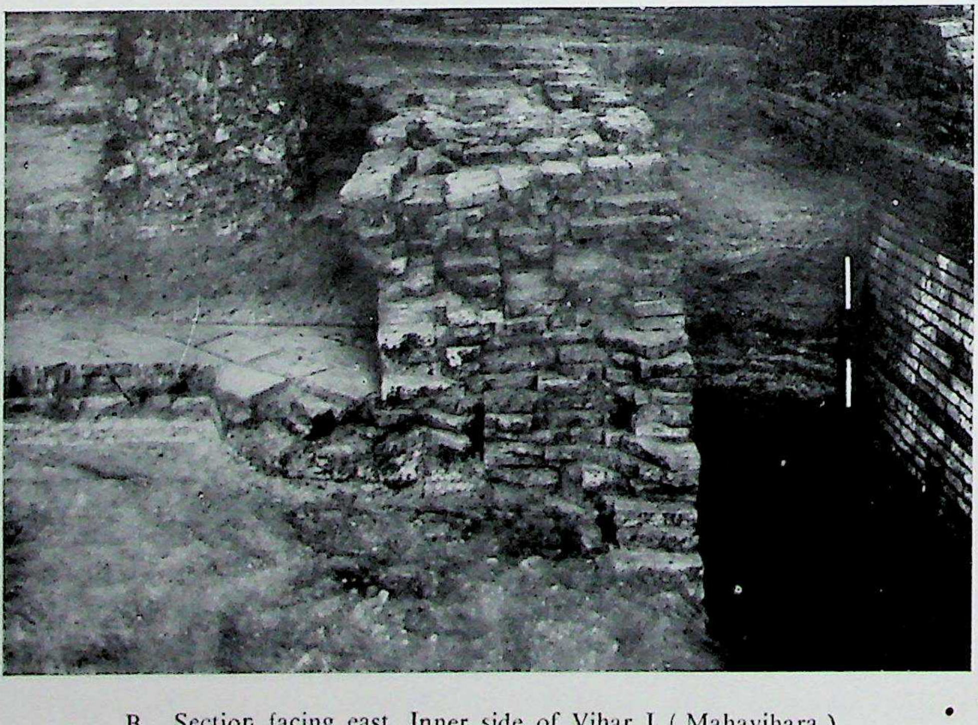


Apsidal chaitya (After excavation)

PLATE IV

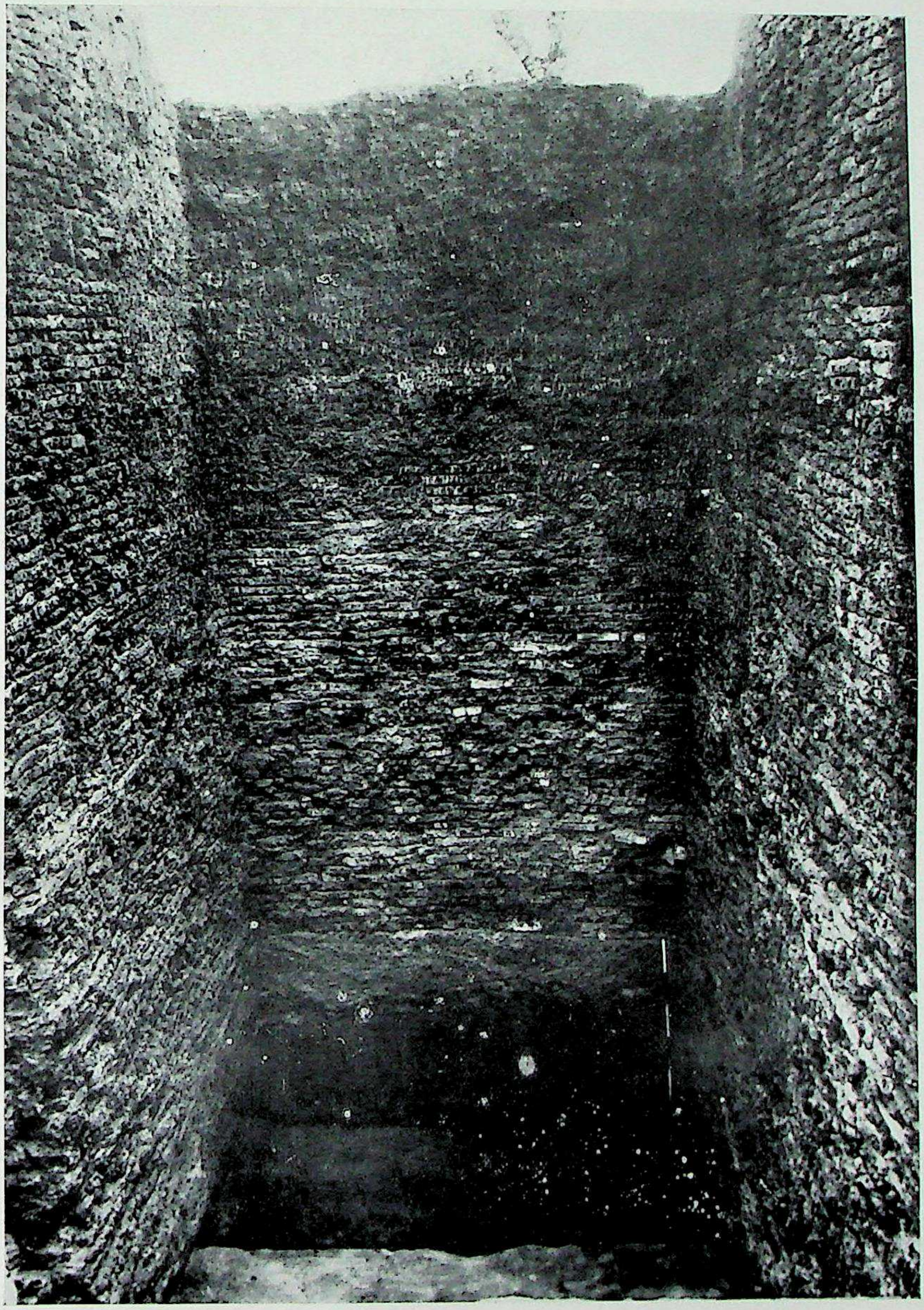


A. Method of excavation of Mahastupa



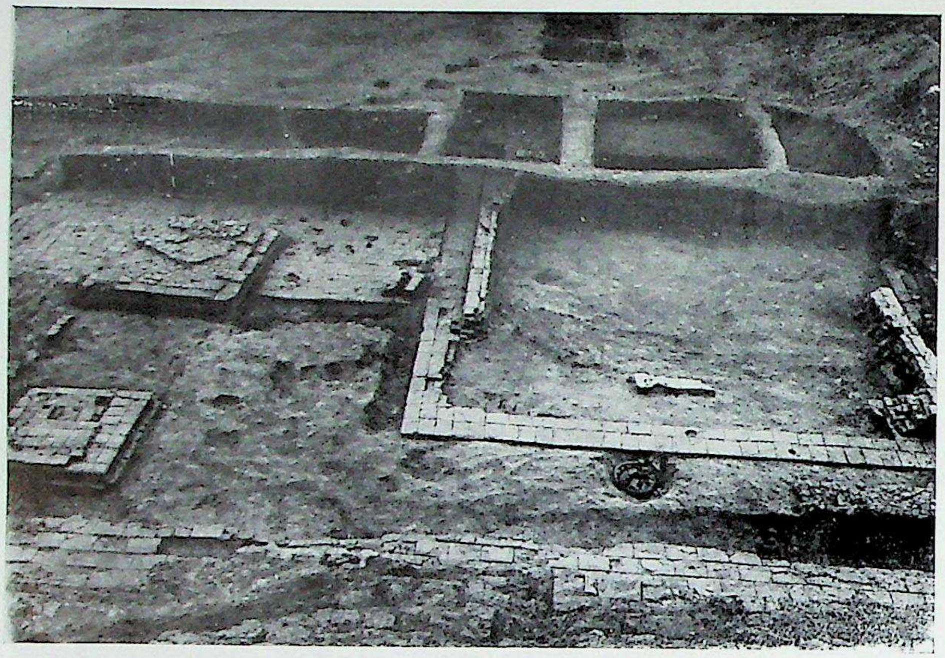
B. Section facing east. Inner side of Vihar I (Mahavihara)

PLATE V

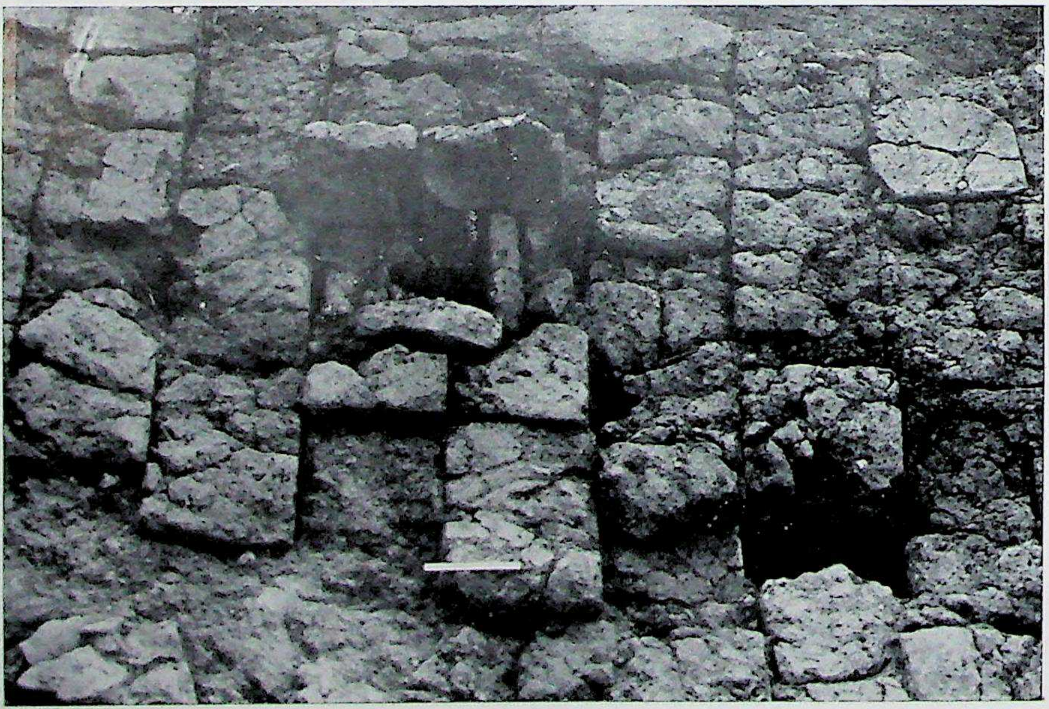


Cutting through Mahastupa. Section facing North.

PLATE VI

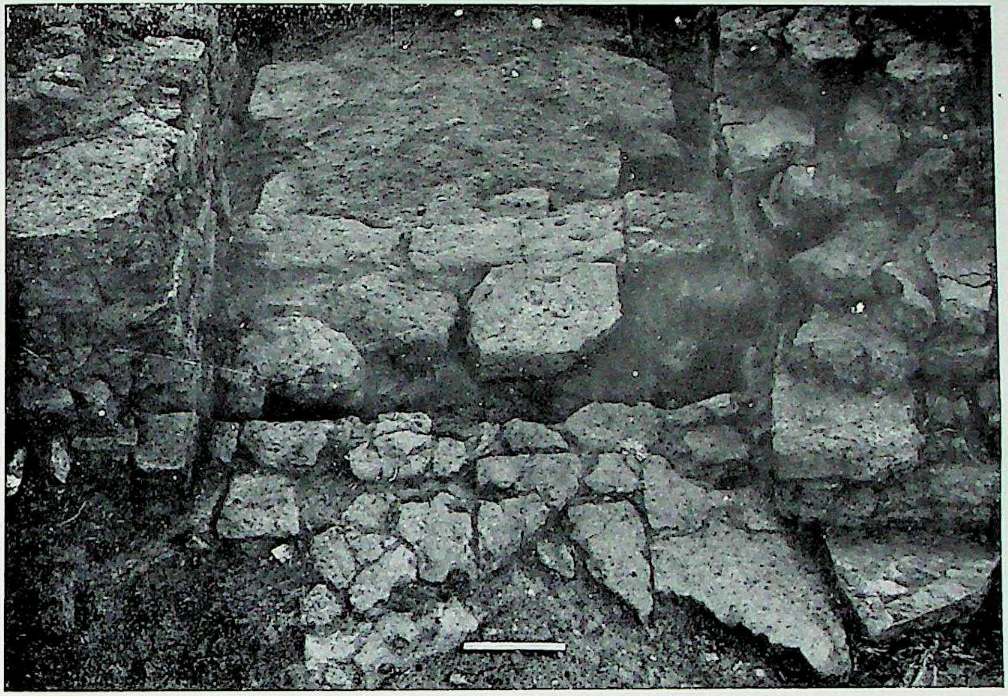


A Area looking west from Bhoja Raja No Tekro or Mahastupa

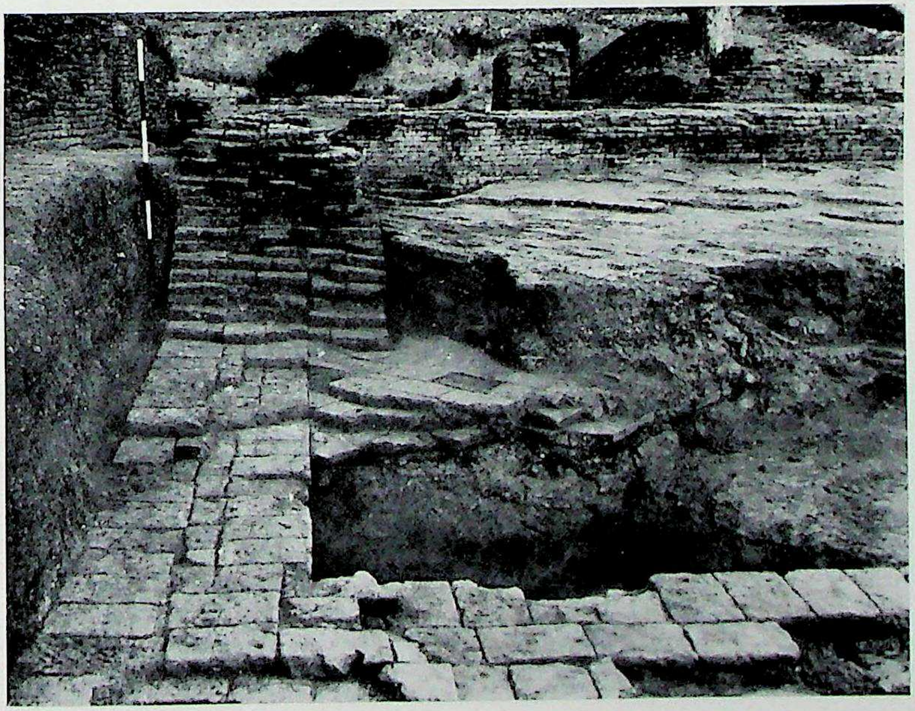


B. Hearth in the centre of Room No. 22 in Vihara I or Mahavihara.

PLATE VII

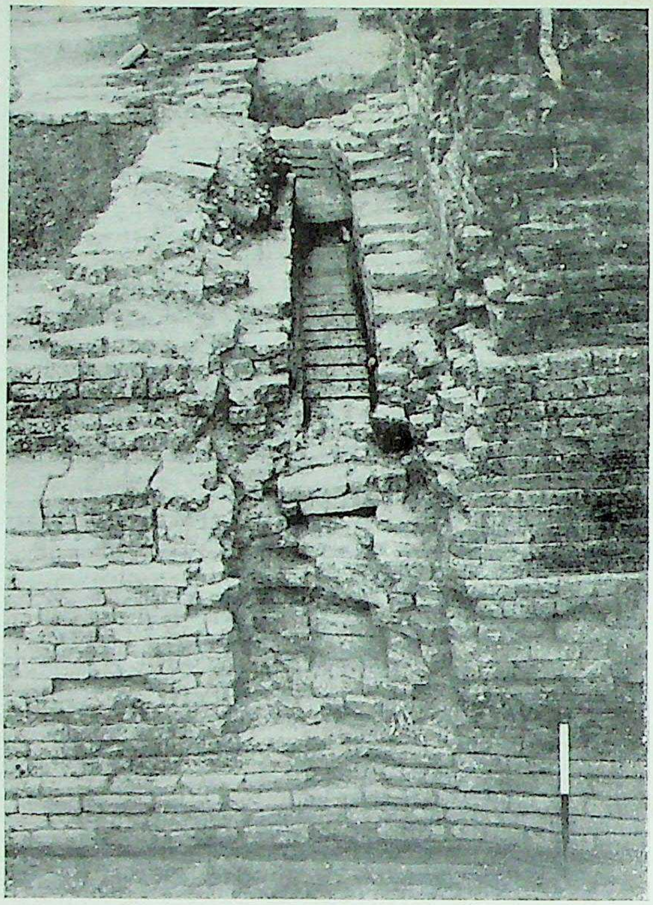


A. Instep (Udumbar) in Room No. 23 in Vihara I or Mahavihara

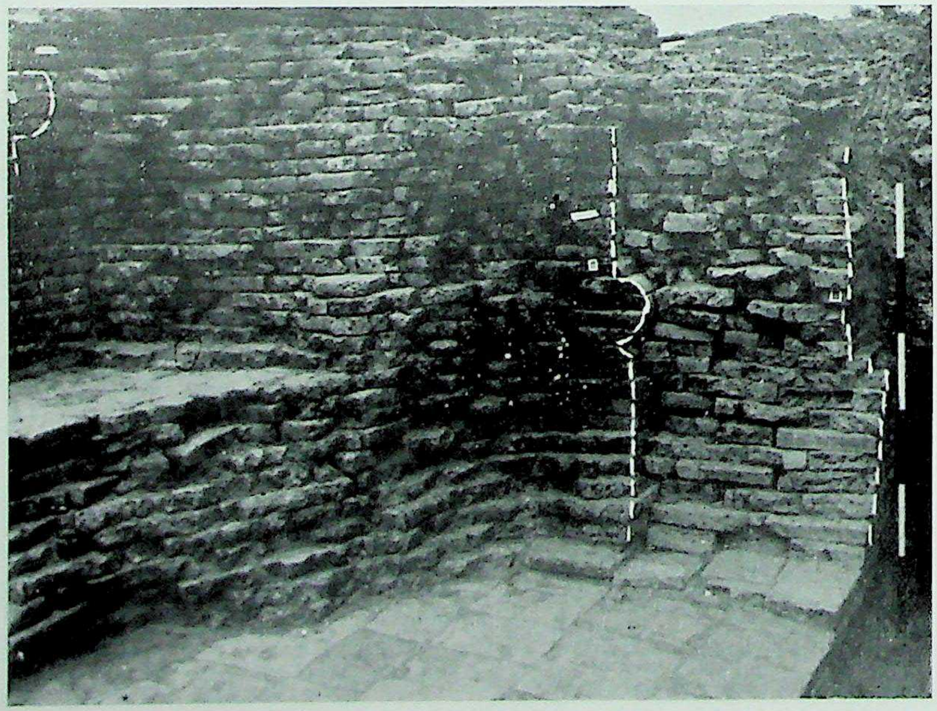


B. Section facing west. Inner side of Vihara I or Mahavihara

PLATE VIII


Phase II
Phase I

A. Passage No 3 with its water channels in Vihara I or Mahavihara



B. Exterior of Vihara I or Mahavihar on the south. Section facing west.

CHAPTER IV

ARCHITECTURE

General Characteristics

Material and Masonry

The builders here preferred two materials; brick and stone. The bricks were well-baked and their normal size seems to be that of 17″ × 11″ × 2½″ to 3″. But the other sizes of bricks viz. 19″ × 13″ × 3″ and 16″ × 11½″ × 2½″, 15″ × 10″ × 2½″ and 13″ × 8″ × 2½″ are also known. The cementing medium is universally the clay generally of reddish brown colour. The black clay is occasionally used. The masonry is well constructed with sufficient care to correctly join and orient the bricks. The brick laying does not always follow, alternate header and stretcher courses. The exterior of the building was variously decorated by the use of special bricks. The cornices were rounded by a clever use of chamfered bricks.

The mud mortar was laid on the bricks and the joints were also well finished in the upper part of the stupa but at lower levels the mud was spread and bricks were laid on it, and the joints were left unfinished.

The stone work is of dry order and local quartzites and quartz boulders are used in this construction. They are faced on either side by brick work. This hides them from view. Whenever the filling of space was necessary yellow kankari earth known as soft murrum was chiefly used. It may incidently be noted that such a use of this material is widespread in Gujarat.

On the basis of general plan and function these structures can be sub-divided into the following categories:

(1) Viharas
(2) Stupas
(3) Chaitya or apsidal temple
(4) Platforms
(5) Compound Wall
(6) Paving
(7) Indeterminate

There were more than two viharas buried in this area, but one of them was completely excavated and the other was partially excavated as already noted. The details of these viharas are as follows:

Vihara I (Fig. 13)

The large four sided Chatushala Vihara with the northern entrance was built on the south of the stupa. It had, in its final phase, a raised verandah running around it. It also had open central courtyard and the rooms arranged around it on a raised verandah. Care was taken to provide passages for entering the rooms at the corners. On the south-eastern side a room was built on the outer verandah and was connected to the main vihara by an entrance. The northern face of the vihara is described. After that the rooms are described in a clock-wise direction from north-east to north-west. Then the inner verandah, courtyard and other features are noted.

Northern side

The northern side of the vihara was highly damaged due to the brick removal by the local gentry. The pits had destroyed the old stratigraphy so the architectural study was the only effective way of separating the various phases on this side.

Entrance

The main entrance was in the centre of the northern side of the vihara. The local stratigraphy here points out that, there was an earlier entrance, which was filled up by yellow kankari earth, to a height of about 4′3″. Over this filling ran the brick pavement of the verandah. At a height of about 4′-6″ from last entrance, the entrance of the second phase is existing. The entrance was 7′-9″ broad.

Verandah Phase I

Near the lower entrance there is a wall 3′-9″ broad with correct bonding. This suggests that these are the remains of the outer verandah of the 1st Phase. No trace of the steps of this phase was left.

Verandah Phase II

At a distance of about 13′-3″ from the entrance, a small brick platform consisting of 18 courses was well preserved. It had an off-set of 10″ on either side. On both sides of this platform regular wall with proper bonding ran to a distance of 25′-7″. Here, is a small off-set on eastern side of the entrance. This off-set had 13 courses of brick work.

Between this construction and the main walls of the vihara yellow earth was used to fill the space. Over this filling regular brick pavement existed 3″ lower than the entrance of IInd period as noted above.

Phase III

After construction of verandah of Phase II, on the northern side, the space in the off-set was filled up by flooring of brickbats constructed in the recess between the steps and the off-set. Whether this was a flooring or the verandah is difficult to determine in absence of the data, but it indicates the last phase of construction. It might have filled in the bay and made the northern face look uniform.

Entrance inside

The main entrance in the final phase was 7′-9″ broad. On its eastern side 10 courses of wall have been preserved. At a distance of 3′-6″ from this entrance a partition wall runs in the north-south direction. Its 18 courses are preserved, but between its 12th and 13th course, a tree root had damaged the wall, which is 13′-4″ long and about 4′ broad. On the western side also, there is a similar construction.

Room No. 1

It is in a highly dilapidated condition. Parts of the brick pavement of this room have been preserved. But its front wall is destroyed. The partition wall between Room No. 1 and 2 is also partly destroyed. The parts of this 3′ broad wall have been preserved. This wall showed only 10 courses. It is interesting to note that in this construction pebbles and fragments of bricks were used. The room is 9′-6″ long and 8′-6″ broad and lies to the east of the entrance.

Room No. 2

This is better preserved. Its entrance is 2′-7″ broad and is situated on the eastern side of the room. Its brick flooring is well preserved. The entrance wall is 3′-2″ thick and consists of 16 courses. The upright bricks were placed just above the flooring and on them the regular wall was constructed. This room is 10′-3″ long and 9′-3″ broad on the inner side. It lies to the east of Room No. 1.

Room No. 3

This is also a better preserved room with its entrance 2′-8″ broad and is situated on the eastern side. Parts of its brick flooring are preserved. The screening wall between Room No. 3 and 4 has 19 well preserved courses. But this wall has been tilted. Its front wall has 17 highly disturbed courses. This room 9′-6″ × 8′-6″, lies to the east of Room No. 2.

Room No. 4

This is the corner room on the north-eastern corner of the vihara. Its entrance is almost in the centre but is highly damaged for measurements. The upper courses on the north and east of this room are practically destroyed. Parts of its flooring have been well preserved. This room is 9′-0″ square.

Passage No. 1

As Room No. 4 is in the extreme corner, for entering it a passage has been given. It is 5′-3″ broad and about 12′ deep and lies to the south of Room No. 4.

Room No. 5

This room is on the eastern side of the vihara. Its inner floor is completely destroyed. Even the entrance is also destroyed. Its wall consists of 19 courses on its northern side. The inner measurements of this room seem to be 8′-6″ × 10′-9″. This room is highly mutilated and lies to the south of Passage No. 1.

Room No. 6

This room has an entrance of 2′-9″. Its internal measurements are 11′-2″ × 8′-5″. This wall shows 16 courses above the floor level and its southern and western walls show the use of gravels and brickbats in its construction. Its entrance is not in the correct centre. It lies to the south of Room No. 5.

Room No. 7

Its entrance is 2′-10″ broad and about 3′ deep. It is 10′-3″ × 9′-3″. Its flooring is well preserved and one brick near the western wall shows circular rubbing which might probably have been developed due to its contact with the door. The

courses preserved above the flooring are 15. This room lies to the south of Room No. 6.

Room No. 8

Its entrance is 3′-0″ broad and 3′-0″ deep. Its internal measurements are 10′-5″ × 9′-5″. Parts of its wall were constructed with the use of gravels and brickbats. Its flooring is in a fair state of preservation. It had also a door on the interior near the western wall. Eleven courses of its wall have been preserved. This room lies to the south of Room No. 7.

Room No. 9

This room is much disturbed. Its western wall is almost destroyed so the parts of its door passage are non-existent. The inner measurements are 9′-6″ × 10′-3″. Parts of its flooring have been preserved. Situated to the south of Room No. 8, it lies on the north of Room No. 10.

Room No. 10

Its entrance is 2′-10″ broad and 3′-3″ deep. Its internal measurements are 10′-3″ × 9′-6″. On its south-western corner a small brick platform consisting of one partly broken brick is preserved. On the southern side a few upright bricks were observed. Eleven courses of its wall have been preserved. Its south is occupied by Room No. 11.

Room No. 11

Its entrance is 2′-10″ broad and 3′ deep. The interior dimensions are 10′-3″ × 9′-3″. Fourteen courses of this room have been preserved. It is followed on the south by Room No. 12.

Room No. 12

Its entrance is through Passage No. 2 and is at the northern end of the western wall. Its entrance is 2′-9″ wide and 3′ deep. Twenty courses in this room have been preserved. The room is 10′-6″ long and 8′-9″ broad. It was the south-eastern room, but Room No. 13 is constructed to its south on the outer verandah.

Passage No. 2

It is in the south-eastern corner of the vihara. It is 11′-10″ long and 6′-4″ broad. There is a back-door 2′-9″ broad and 3′ deep in this Passage. Twenty-six courses of its wall have been preserved. This wall shows much crushing and repairs of a later date. These repairs clearly indicate that broken parts of bricks etc., were left as they were and the repairs were carried on.

Room No. 13

This room is a later addition to the structure and occupies the south-eastern corner of the vihara. Due to its fragmentary nature, it is difficult to judge its inner dimensions. But its length is 7′-9″. Its doorway is 2′-10″ broad and 3′ deep.

Room No. 14

This room is to the west of Passage No. 2. Its entrance is on the eastern side and is 3′ broad and 3′-2″ deep. Its inner measurements are 9′-3″ long and 7′-6″ broad. 19 courses of this room have been preserved. It lies on the east of Room No. 15.

Room No. 15

Its entrance side is highly damaged, hence, no data about its entrance are available. It is 8′-6″ long and 11′-10″ broad. 12 courses of the wall of this room have been preserved. On its west is Room No. 16.

Room No. 16

The entrance of this room is partly damaged. But it seems to have been 7′ broad. On the north-east and north-west corner of this room is a small platform 3′-3″ square. The side walls have circular moulding a small instep and a platform which shows a moulding on the top also. The flooring of this room consisted partly of brick and partly of stone. This room formed the shrine in the vihara. Its back side is damaged. So one does not know the construction on the back nor we have any idea of its depth. It is 25′-10″ long. This is the largest room in the vihara. To its west is Room No. 17.

Room No. 17

Its entrance is 2′-9″ broad and 3′ deep. Its length is 17′ and breadth is 9′-3″. On the western side of this room there was a wall built at a distance of 3′ from the entrance. This wall is 1′-7″ broad and its 10 courses have been preserved. It is built on the flooring of this room. It was probably a store for the shrine. The filling in this room had a number of pot-sherds. 20 courses of the western wall have been preserved. It separates this room and Room No. 18.

Room No. 18

Its entrance is 3′-0″ broad and 3′-0″ deep. The entrance is more towards the west. The inner dimensions of this room are 9′-2″ × 10′-6″.

Room No. 19

The entrance of this highly damaged room is towards the eastern side and is 3′-0″ broad and 3′-0″ deep. Its inner size is not available. This is the south-western room. 18 courses of its wall have been preserved.

Passage No. 3

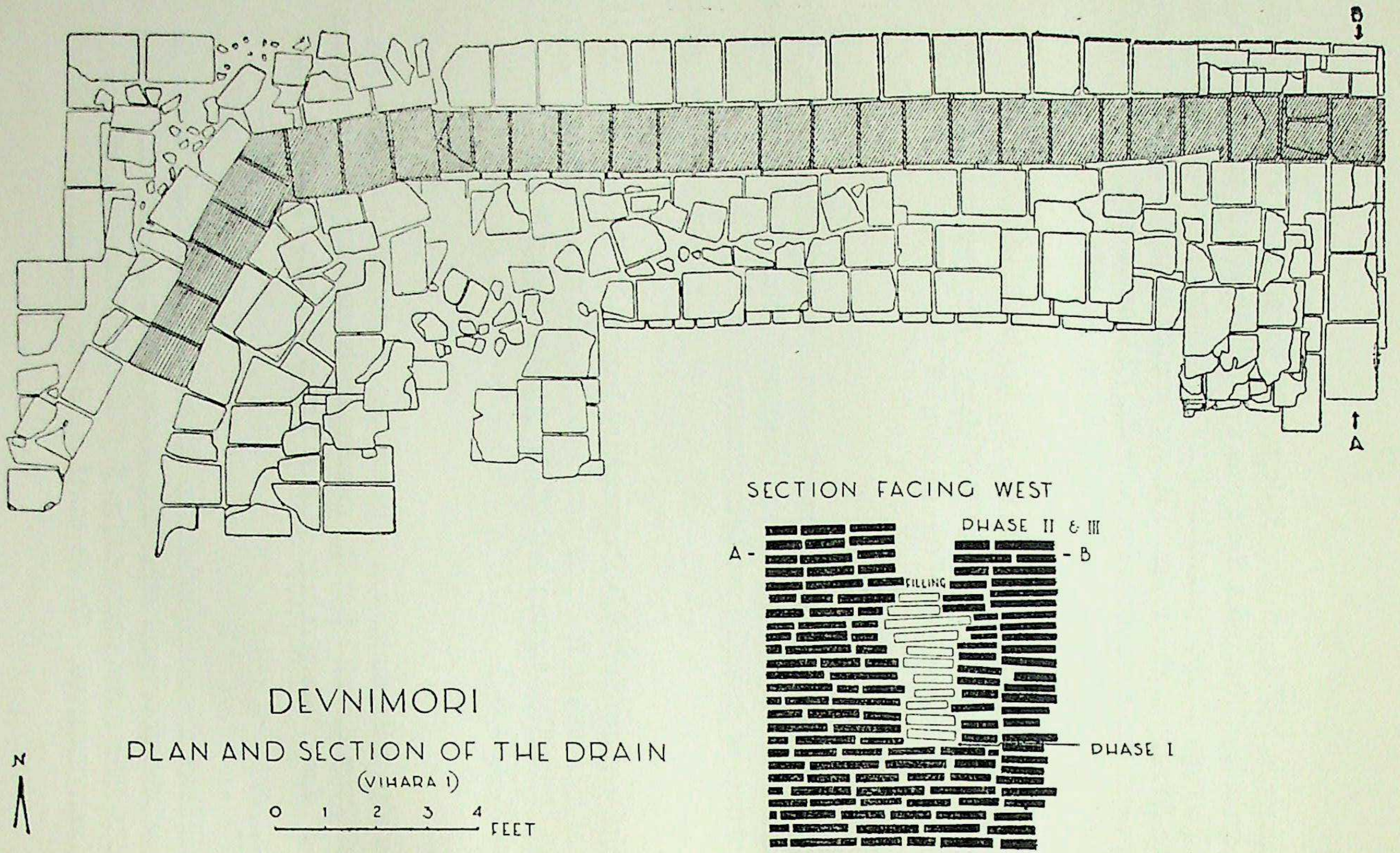
The third passage is highly fragmentary but was built over a water channel. As one side of it is broken it is not possible to give its measurement. On its north lies Room No. 20. The western side of this passage shows two phases of the drain (Fig. 14 and Pl. VIII A.).

Room No. 20

This is also a damaged room, hence, its dimensions, the doorway and other details cannot be gathered. But the remains of its wall suggest that it was 12′-6″ long and 7′-9″ deep. Its northern wall separates it from Room No. 21.

Room No. 21

Front side of this room as well as its back are destroyed, hence, its depth, the position of the door and other details cannot be ascertained. Its side walls measure 8′-3″. The room seems to be 9′-3″ broad. 14 courses of the wall of this room have been preserved. On its north lay Room No. 22.


B
A
SECTION FACING WEST
PHASE II & III
A -
- B
FILLING
PHASE I
N
0 1 2 3 4 FEET

DEVNIMORI

PLAN AND SECTION OF THE DRAIN

(VIHARA I)

Fig. 14

Room No. 22

This room also is in a highly dilapidated condition. Parts of its flooring are visible. It seems to be 9′-6″ long. Its depth cannot be determined due to its damaged condition. About 4 courses of its side wall have been preserved. Its entrance is near the southern wall. The entrance is raised on roof tiles. This suggests that this room was repaired at a later date. In it are the remains of a hearth (Pl. VI B). It is made of two upright bricks with a hole in the centre. This construction is 1′-9″ long and 6½″ high. Inside of the hearth is made by upright bricks and has a semicircular furnace, with blackened overfired surface. It is 6″ deep. This furnace is almost in the centre of the room. It is a small hearth similar to the one used by goldsmiths and may represent the remains of some small scale industry. Probably it was made by breaking the early flooring and hence suggests the use of some parts of the vihara probably after its abandonment. Room No. 23 lies to its north.

Room No. 23

This room is also fragmentary. But its door-frame is much better preserved. It gives a clear indication of a revolving door fixed over a schist-stone. The wooden instep (*Udumbara*) has been destroyed, but its position can be clearly seen in the brick work (Pl. VII A). This door is 3′-0″ broad and 3′-0″ deep. Parts of its flooring have been well preserved. Its breadth is 9′-9″ and length seems to be 9′-6″. 10 courses of its wall have been preserved. Room No. 24 is on its north.

Room No. 24

This room is also damaged. Its flooring is totally destroyed. Its door is towards the northern side and is 2′-10″ broad and 3′-0″ deep, and its inner measurements seem to be 9′-6″ long and 8′-3″ deep. Eleven courses of its wall have been preserved. On its north lies Room No. 25.

Room No. 25

The inner flooring of this room is completely destroyed. Its door is 2′-10″ broad and 3′-0″ deep. Its inner measurements are 8′-6″ deep and 9′-9″ long. Ten courses of its wall have been preserved. Room No. 26 lies to its north.

Room No. 26

The entrance is 2′-10″ broad and 3′-0″ deep. Its flooring is destroyed. Its inner measurements are 9′-3″ broad and 8′-9″ long. The position of its door is well preserved. On its north is passage No. 4.

Passage No. 4

This passage is 5′-8″ broad and 12′-5″ long.

Room No. 27

This room occupies the north-western corner of the vihara. Its entrance as well as its western side are mutilated. So it is difficult to give its inner measurements.

Room No. 28

This room lying to the east of Room No. 27 is a better preserved one. Its entrance is 2′-10″ broad and 3′-0″ deep. The entrance is on one side. Its inner measurements are 10′-0″ long and 8′-9″ deep. Its western wall shows distinct signs of damage and repair. This picture continues on its southern wall also.

Room No. 29

This is also a comparatively well preserved room to the east of Room No. 28 with the entrance 2′-6″ broad and 3′-0″ deep. The inner measurements are 10′-0″ long and 9′-0″ broad. Nineteen courses of its wall are intact.

Room No. 30

Its entrance is 2′-10″ deep. Inner measurements are 10′-8″ long and 9′-0″ broad. Fourteen courses of its wall have been preserved. Its entrance is nearly in the centre. The main entrance lies to its east.

Inner Verandah

Inside the series of rooms is a verandah consisting of two separate parts. One of it is the inner filling of yellow earth mixed with gravels of quartzite, quartz and occasionally agate pieces. This yellow filling is rammed between the wall of the rooms and inner wall on the side of the open courtyard.

Inner Wall

This inner wall is 4′-4″ broad and shows seven courses of bricks above the flooring. These bricks measure 15″×10½″ 17″×11″, 16″×10½″, 15½″×10½″, 16″×10″, 13″×9″. In this wall occasionally schist and quartzite pieces were used. The southern side of this wall gives an interesting picture. (Fig. 9, Pl. VII B and Pl. IV B). It suggests that originally the wall was 3′-5″ broad and remaining 1′-10″ is a later addition to the earlier part. This wall seems to differ in thickness varying from 4′-4″ to 5′ -5″. Almost at the top there was a moulding with rounded upper side made of chamfered bricks. Closer study of this wall on the south-eastern corner suggests that a third wall was built at a later stage (Fig. 9, Pl. IV B). This third wall rests on the platform of the second Phase and suggests later repairs.

Water drains

On this wall are a number of water drains. They start from the back of this wall and run towards the open courtyard. These are shallow drains 7″ broad and 5″ deep and 3′-10″ long. They are placed at a distance varying from 5′-4″ to 6′-4″ from one another. Evidence on the northern side suggests that some of them were covered by bricks. These channels are better preserved on the western and north-western side. This may be due to the fact that the rain clouds and showers come from south-west and hence, the roof and walls would afford better protection to the western and part of north-western side.

On the s.w. corner of the open courtyard was a large drain that might have carried water outside the vihara.

Steps

Almost in the centre of this wall on the northern and western side are two platforms. They probably had the steps to go on the verandah of the inner courtyard. On the eastern face also similar steps existed but their evidences are highly mutilated. While the one on the south is totally destroyed. This platform is 12′-3″× 15′-0″ on the north and 15′ square on the west.

Vyakhyana-Pitha

The *Vyakhyana-Pitha* on the west is a platform partly on the yellow filling and partly on the inner wall of the verandah. It is 5′-3″ × 13′-0″. It consists of 8 courses of bricks. Its fifth course is decorated towards the courtyard by the use of bricks with triangular cuts. It has a small projection towards the courtyard. It was built over the verandah platform. The water channels starting from it suggest that it was probably covered by projecting roof. This *Vyakhyana-Pitha* was probably used for reciting the sutras after the worship of the stupa and other ceremonial meetings.

Inner courtyard

The inner courtyard is paved by bricks running diagonally. Two courses of this pavement are clearly seen in the section. At many points this courtyard is damaged. This brick pavement overlies rammed yellow earth. Below the earth is another brick pavement similar to the one already described. This platform runs below the wall that is added on the southern side. On this side there are remains of the foundations of probably staircase. This is the earliest part of the vihara. On this side the earlier part of the wall preserves a circular moulding on both sides of the cutting (Fig. 9 and Pl. IV B and VII B). This moulding probably represents the top of the side of the courtyard. This could be inferred due to the rounded top of the second phase of the courtyard of the vihara. Behind this, is the yellow earth and the rooms on the top probably are raised on the spot of the old rooms. On the s.w. corner of this vihara is a drain, which carried the water out of the courtyard.

Exterior of the Vihara

The southern side

On the southern side the vihara is much damaged. A study of this side suggests that just outside the rooms, the verandah of the vihara was completely built. This is very clearly suggested by the moulding which runs on the wall (Fig. 9 and Pl. VIII B). This moulding is covered up by a brick wall which is about 8 ft. thick. It shows a circular moulding made of four courses of well chamfered bricks. It is also covered up by another wall 2′-9″ thick, which also shows a moulding where chamfered bricks were used. These three distinct brick platforms are built by bricks of 16′ × 11″ suggesting thereby that the additions were done very rapidly.

Beyond the last wall runs a step-like projection on the s.w. corner. Probably it was the part of regular steps. There are a few post-holes that can be observed here.

The inner most wall takes a regular turn on the western side. The middle wall seems to have been destroyed due to the activity of the brick removers. But the third wall continues its course in the west and runs almost parallel to the first wall. Probably these extensions were made for preparing a verandah running all around the vihara.

Conclusions

The present study showed that the original vihara was probably a small brick structure 135′ × 125″ (Phase I). The inner moulding above the courtyard verandah clearly indicates that the courtyard had a raised verandah similar to that seen for the second phase. The rooms of this structure were co-extensive with the present rooms. This phase was covered up at a later stage with additions for making verandah on all sides of the rooms on the outside. It is very clear that the plan of the exterior was changed twice.

A further proof for this change is given by the Room No. 13 which occupies the south-eastern corner of the open verandah of the vihara.

Storey

This vihara had only one storey. This could be very well ascertained by the roof-tiles that lay on the ground floor. Here they were mixed up with brick debris. It is seen that the present standing walls are about 5 feet high and the debris in the room was not thicker. This limited amount of the fallen material mixed up with the roofing tiles, nails etc. point to the fact that this was a single-storey vihara. Its roof, which rested on the walls probably projected a few feet out of the door-ways. This is shown by the construction of many water channels on the platform of the verandah. This roof was not supported by the pillars of the verandah as no remains of post-holes at regular interval were observed. The roof-tiles were triangular and rectangular but no semi-circular ones were found. This evidence suggests that the roof might have been a pent-roof.

The vihara had undergone some repairs after it was finally constructed. These repairs included (i) The screening wall in Room No. 17 (ii) and repairs to the walls of passage No. 3 and in the room No. 28, passage No. 2 and the changes made on the northern exterior.

Stupas

Five stupas were excavated at Devnimori. Out of them four were smaller platform-like highly damaged Uddesha stupas and one was a large *Sharira* stupa. The latter is named as Mahastupa in an inscription. It consists of the foundation, the base with a *pradakshina-patha* on the top. Behind it rose the second tier. Over it probably there was a third tier which was surmounted by a drum. The total height of this stupa is 37 feet, from the surrounding area. The east of this stupa was flanked by an oblique platform and a series of walls.

The foundation

The foundation of the stupa consists of brickbats, gravels and yellowish kankary earth and was probably strengthened by ramming. The whole rested on a slope, about 6′ in 120′.

The base (Pl. IX A)

Over this foundation was built a course of bricks which projected 0′-6″ beyond the upright wall as is seen on western face.

On this 6 courses of bricks (1′-4″) were laid. They run to a length of 86 feet on each side of the stupa. They consist of three courses of stretchers followed by a header, a stretcher and a header. Above these six courses, a circular cornice was developed by four courses (10″) of chamfered bricks. The lower and upper courses are more chamfered than the two middle courses. Above these courses, there is a course of bricks with a right-angled projection forming something like an *antarala*. Above this are two courses (9″). The lower one is chamfered and the other one is straight. All these three courses are stretchers. At this height the wall is turned into bays by the use of pilasters fixed in the wall. The bases of these pilasters consist of a single brick with three mouldings (1′-1″ broad 6″ high) which give the shape of a rectangular pot. From this pilaster rose the shaft (1′-8″) which is highly damaged. Over this shaft rose the capital with floral patterns (6″). These capitals were surmounted by a frieze consisting of four different types of decorations. Over this decoration is the *pradakshina-patha* or the path of circumambulation. The base of the stupa was divided into 11 bays by these pilasters. Remains of nine pilasters are seen on the south; nine on the western side; eight on the northern side and six on the eastern side.

Thirteen courses of bricks were laid from the base of the pilaster upto the upper moulding. They are built as follows:

Two stretchers,
One header,
Two stretchers,

One header,
Two stretchers,
One header,
Two stretchers,
One header, and
One stretcher.

The pilasters are covered up as follows:

The base and the capital run to a height of two courses each and the shaft runs to a height of nine courses.

The Pradakshina-patha

Above this moulding is an 8 feet broad platform laid generally by stretchers. Here headers occur at few places. This is the *Pradakshina Patha.*

Second Tier

Over this *Pradakshina patha* rises six vertical courses of bricks. They are arranged as 1 header, 2 stretchers, 1 header, 1 stretcher, 1 header. Over these courses rises a cornice composed of 6 bricks out of which 4 bricks (*i.e.* 2 upper and 2 lower) are chamfered whereas the remaining two are plain. Over this part there is heavy destruction and repairs so that it is not possible to know the earlier design, except at one place where a brick cut at right angle is seen. Above this brick is seen a niche in the southern part. This niche runs to a height of 13 courses. Beyond these courses rise other vertical courses. These courses are set much deeper all over the stupa. The open niches might have carried the arches that were found *in situ.* This was probably the end of the second tier.

Over this tier probably the third tier existed. This is in a highly dilapidated condition. On the top of the tier is the hemispherical drum.

On the second tier on all faces are niches (Pl. IX. B).

Parts of these niches are well preserved but the front side of the stupa is heavily damaged, and has undergone repairs. These repairs are seen as rough work on the circular moulding and wrong use of decorated bricks (Pl. X A). Even though the damage is heavy and it is difficult to determine the nature of the decorations, the bases of pillars, and stilted arches that were found *in situ,* as well as the position and number of the images of Buddha it would be suggested that the face of the second tier was decorated by 16 images of Buddha, and an equal number of solid

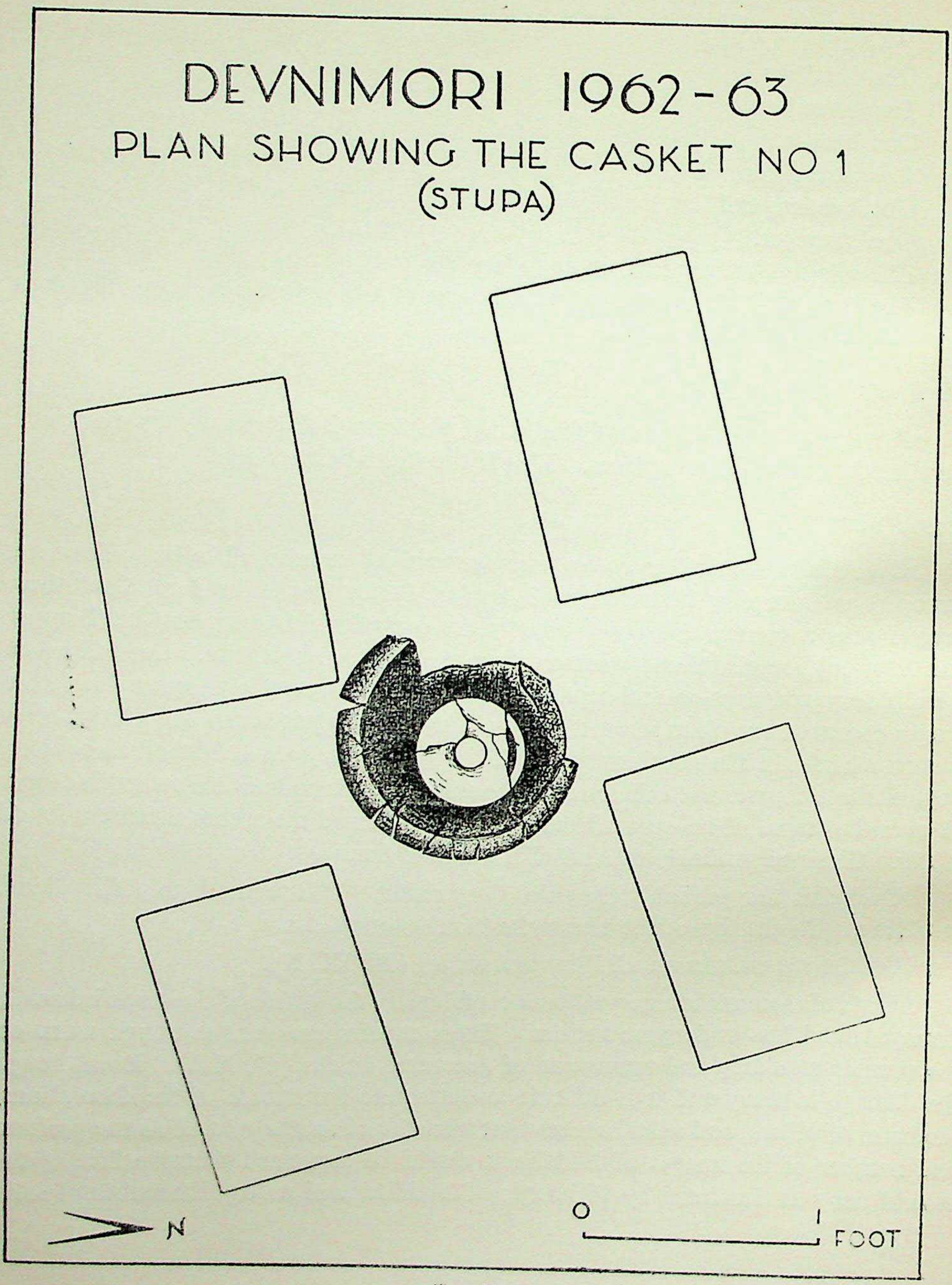
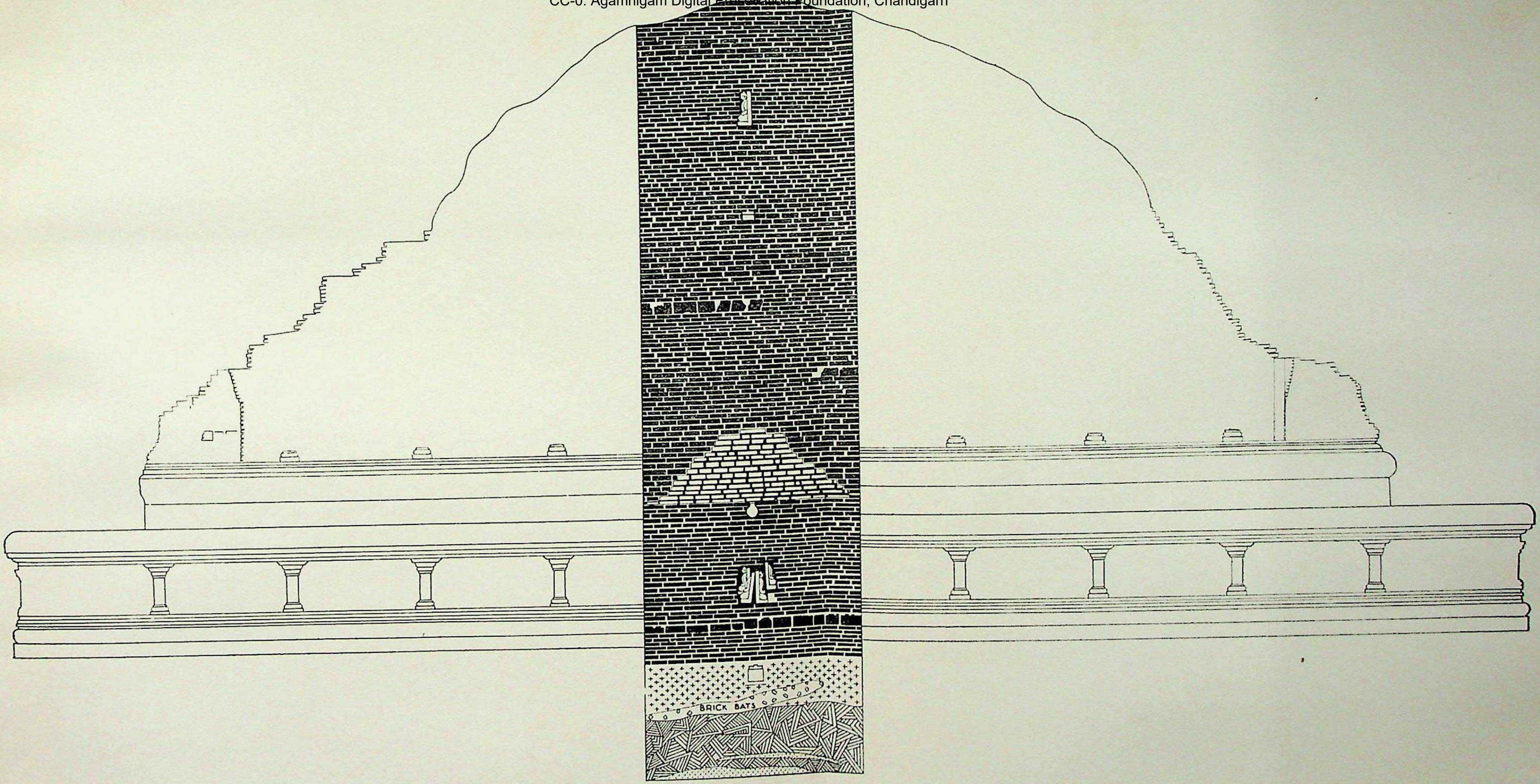

DEVNIMORI 1962-63
PLAN SHOWING THE CASKET NO 1
(STUPA)

Fig. 16



DEVNIMORI 1962-63

ELEVATION OF THE STUPA SHOWING THE SECTION OF THE TRENCH

2
4
6
8
10
12
FEET

Fig 15

arches and four stilted arches. The face was divided in 9 bays and in them these decorative elements were distributed. The niches were decorated by the stilted arches and the remaining bays were adorned with the arches and images. Above these decorations probably ran a cornice similar to that below the *Pradakshina-Patha*.

Above this part, the face of the stupa seems to recede backwards and though some part is highly damaged a ledge is distinctly seen above the niche. This feature along with the study of the internal arrangement of the brick courses and the terracotta plaque suggest that there was a small tier at this point. It must have served as a base for the drum and given it a rather elongated appearance. Due to its damaged condition it is not possible to judge its decorative features. The natural agencies of wind, water and vegetation seem to be responsible for the colossal damage. Over it rather elongated looking drum rose to complete the height of this stupa. The *harmika* and *chhatravali* are destroyed completely. Probably they were of wood.

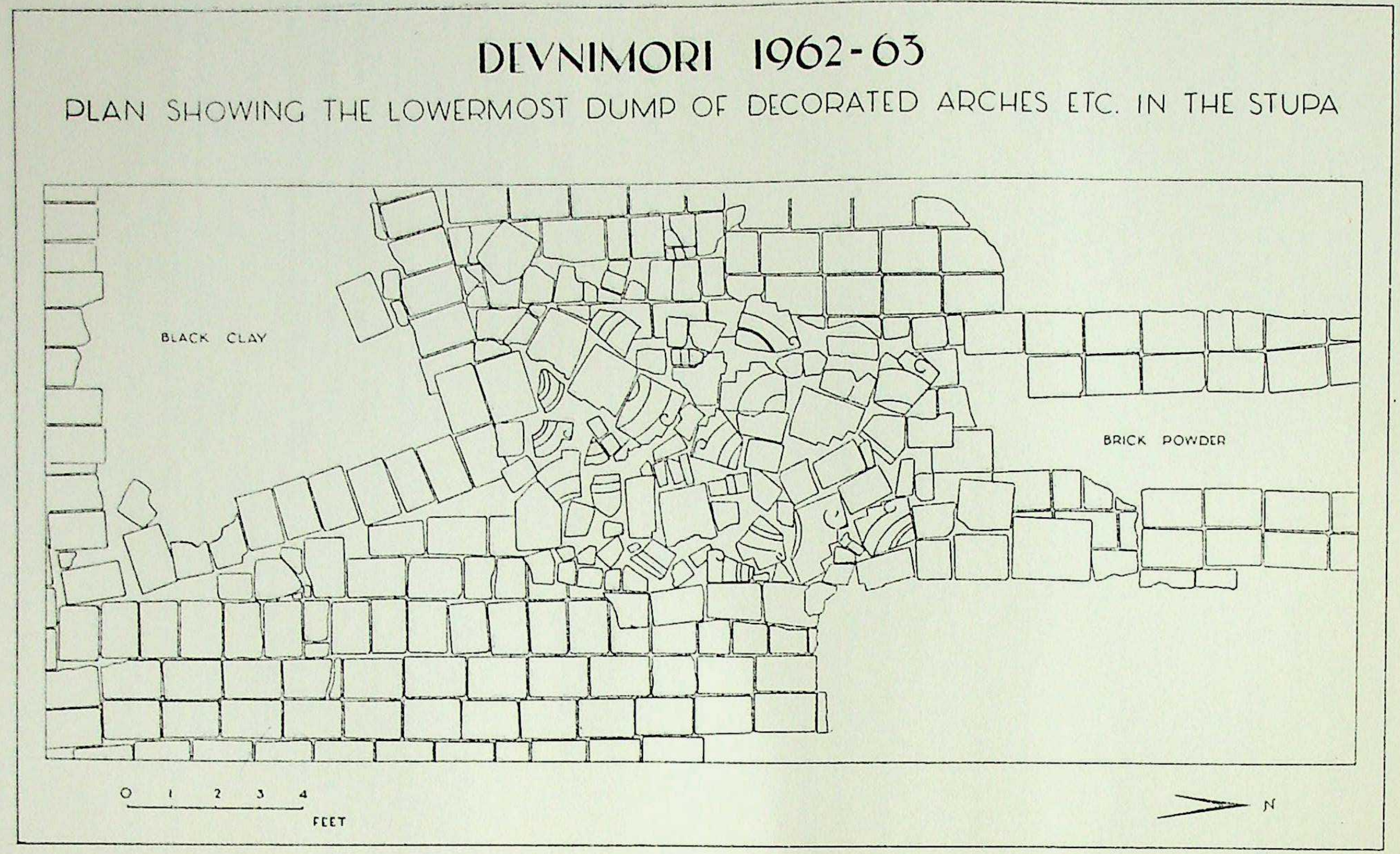
Inner construction

The heavy damage of the outer face on the upper part of the stupa is in marked contrast to its well preserved inner construction. The internal features of the stupa as revealed from the trench of 1962-63 are as follows. (Fig. 11 and 15 and Pl. V).

The base of the stupa rested on the natural black clayey earth which had a slope of 1:20 as already noted. On the foundation rested a casket in an earthen pot, (Pl. X B) that was placed between 4 bricks (Fig. 16 and Pl. XI) and it was covered up with black clay.

Over this base the stupa was constructed by arranging the bricks. The bricks were laid on the mortar but the vertical joints were not filled up. After arranging the bricks another layer of the mud mortar was laid and on it rose another course. The sixth course from the base consisted of overburnt or broken arches and door jambs (Fig. 17 and Pl. XII A).

This was covered up by ordinary bricks. Above this construction on course No. 13, eight Buddha images were placed inside the stupa (Fig. 11 and 15, Pl. XIII). The inner empty space was filled by red brick powder and the whole group was covered up by the masonry (Course 13 to 20).



DEVNIMORI 1962-63

PLAN SHOWING THE LOWERMOST DUMP OF DECORATED ARCHES ETC. IN THE STUPA

BLACK CLAY
BRICK POWDER
0 1 2 3 4
FEET
N

Fig. 17

At the height of the *pradakshina-patha* (course No. 35; Fig. 18 and Pl. XIV A) a pear shaped pot with sagger base was placed in the centre of the mound. From this pot eight silver coins, powdered material and gold and silver foils were obtained. This pot was covered up by a stepped structure (course 36-50) (Figs., 15, 19 and Pl. XIV B and XV) built of red bricks with coarse surface. This structure might have been used to mark the centre and some ceremonial. Around this structure the tiers of the stupa were built up (Fig. 19).

On 59th course jambs of bigger arches were found on the western side of the trench (Fig. 20 and Pl. XII B). The course No. 65 gave a lion's head. Higher up on course No. 74 fragments of arches were dumped in the stupa (Fig. 21 and Pl. XVI A). Course No. 91 was the last course below the drum.

Course No. 92 marked the beginning of the drum. (Fig. 22). It has a square in the centre and a volute runs round it. On a small artificial depression in the central brick, on the succeeding course, a relic casket with inscription was placed.

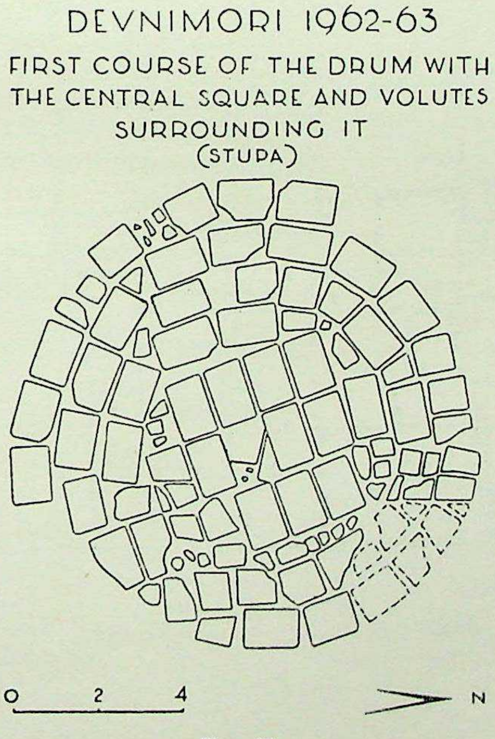

DEVNIMORI 1962-63
FIRST COURSE OF THE DRUM WITH THE CENTRAL SQUARE AND VOLUTES SURROUNDING IT
(STUPA)
0
2
4
N

Fig. 22

DEVNIMORI 1962-63

PLAN SHOWING THE POT BELOW THE STEPPED CONSTRUCTION IN THE STUPA

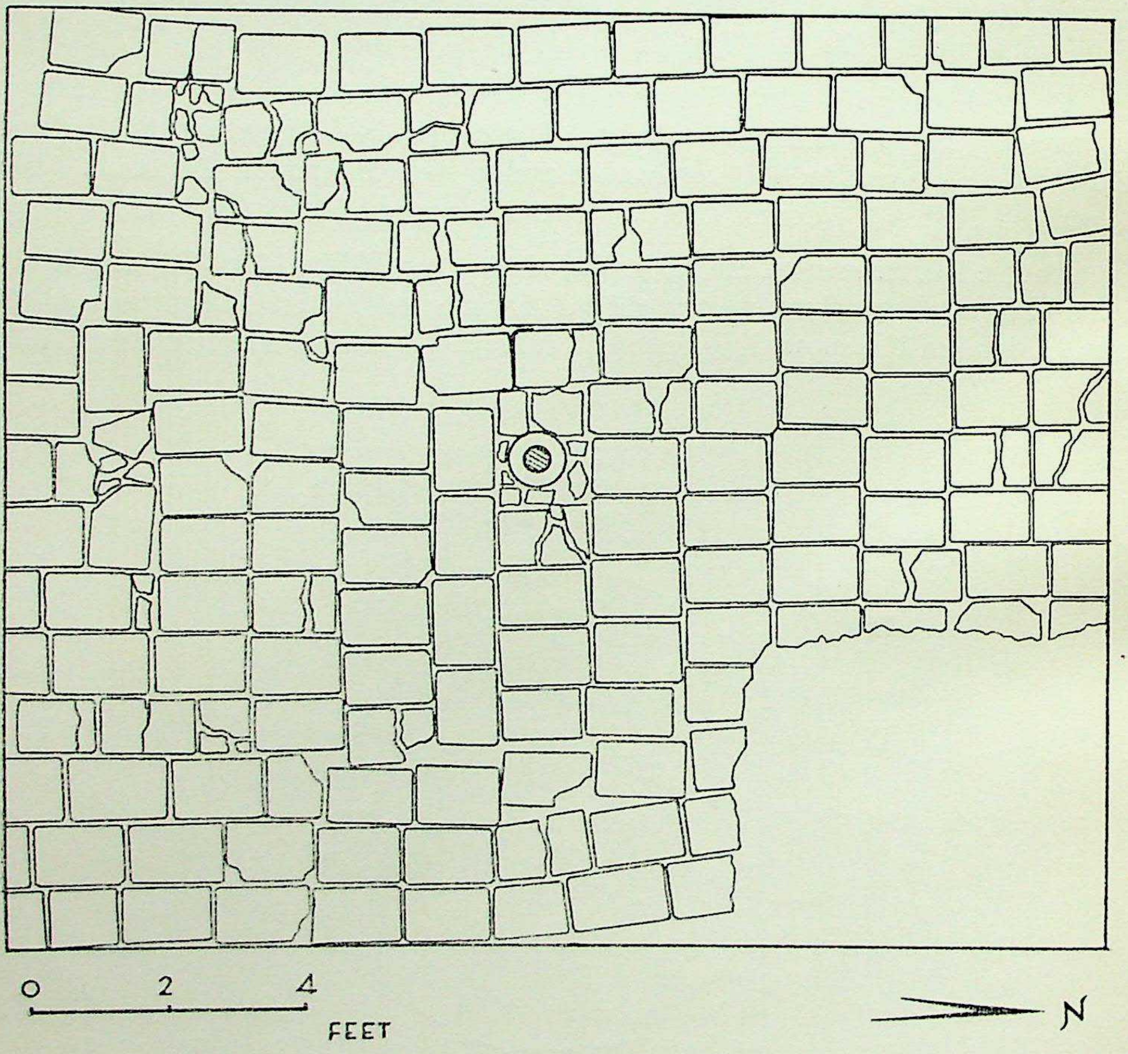


Fig. 18

DEVNIMORI 1962-63

PLAN AND SECTION OF THE STEPPED STRUCTURE
(STUPA)

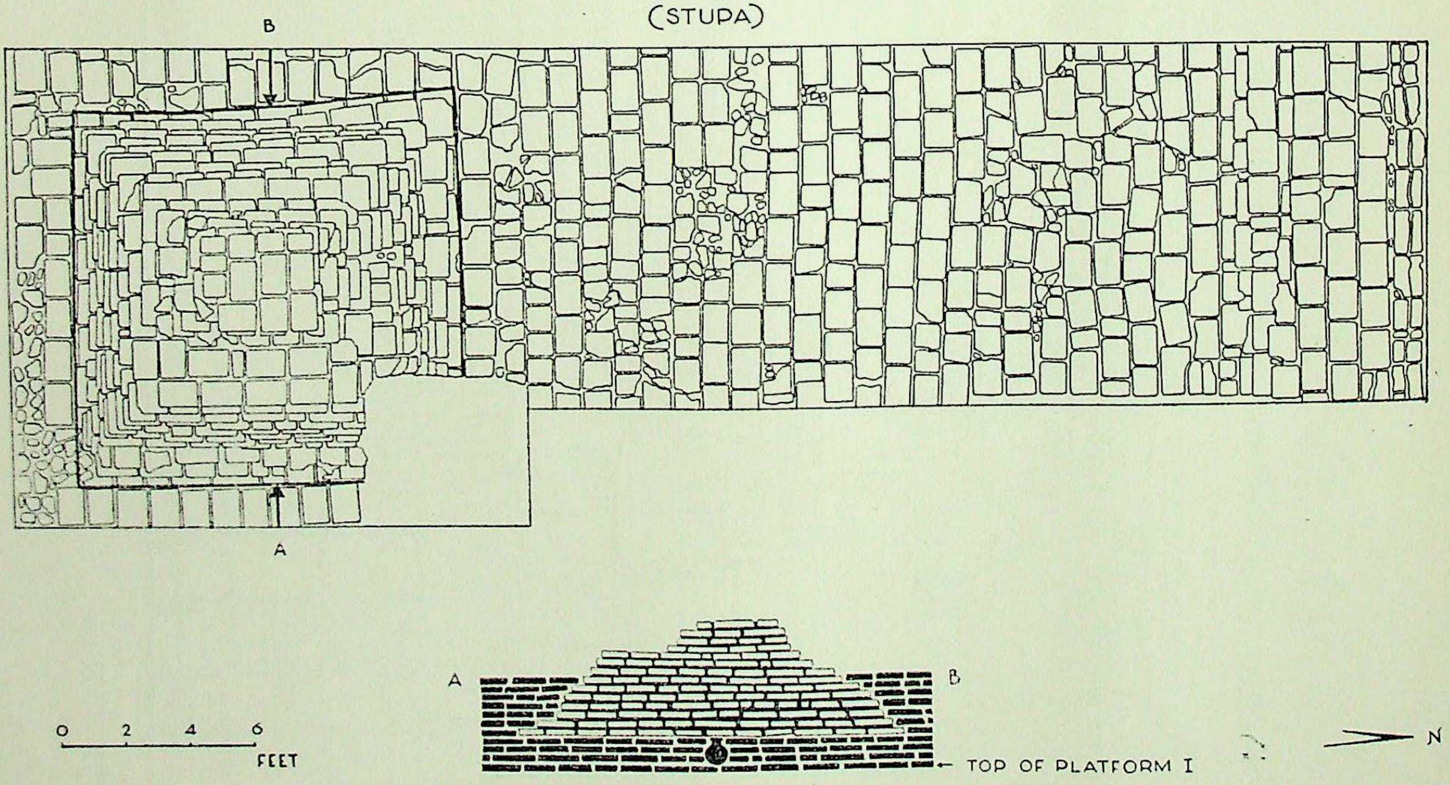
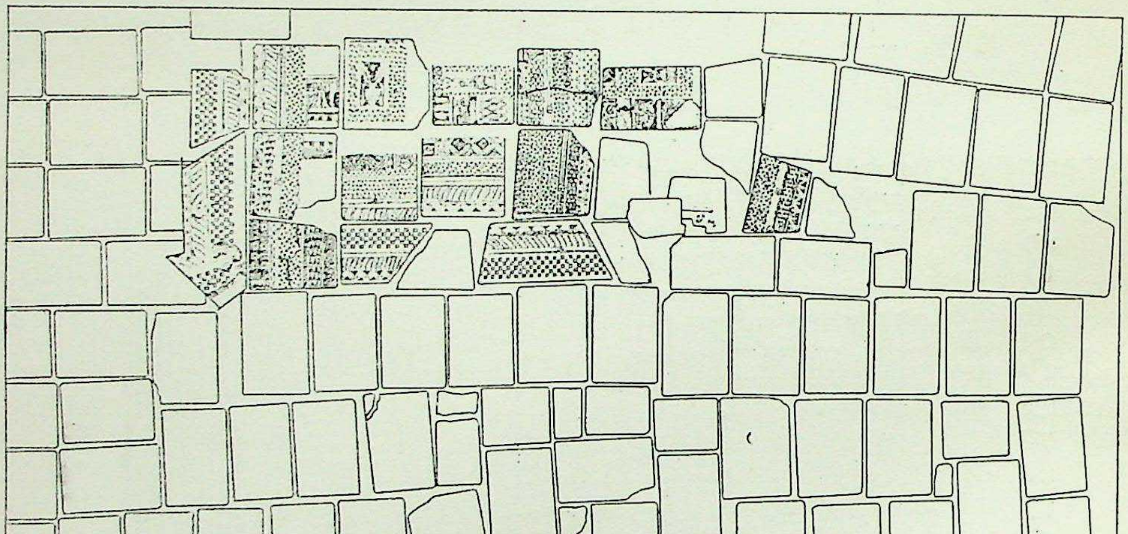

B
A
A
B
TOP OF PLATFORM I
0
2
4
6
FEET
N

Fig. 19

DEVNIMORI 1962-63

PLAN SHOWING THE DECORATED JAMBS AND ARCHES IN THE STUPA



Fig, 20

DEVNIMORI 1962-63

PLAN SHOWING THE ARCHES DUMPED IN THE STUPA

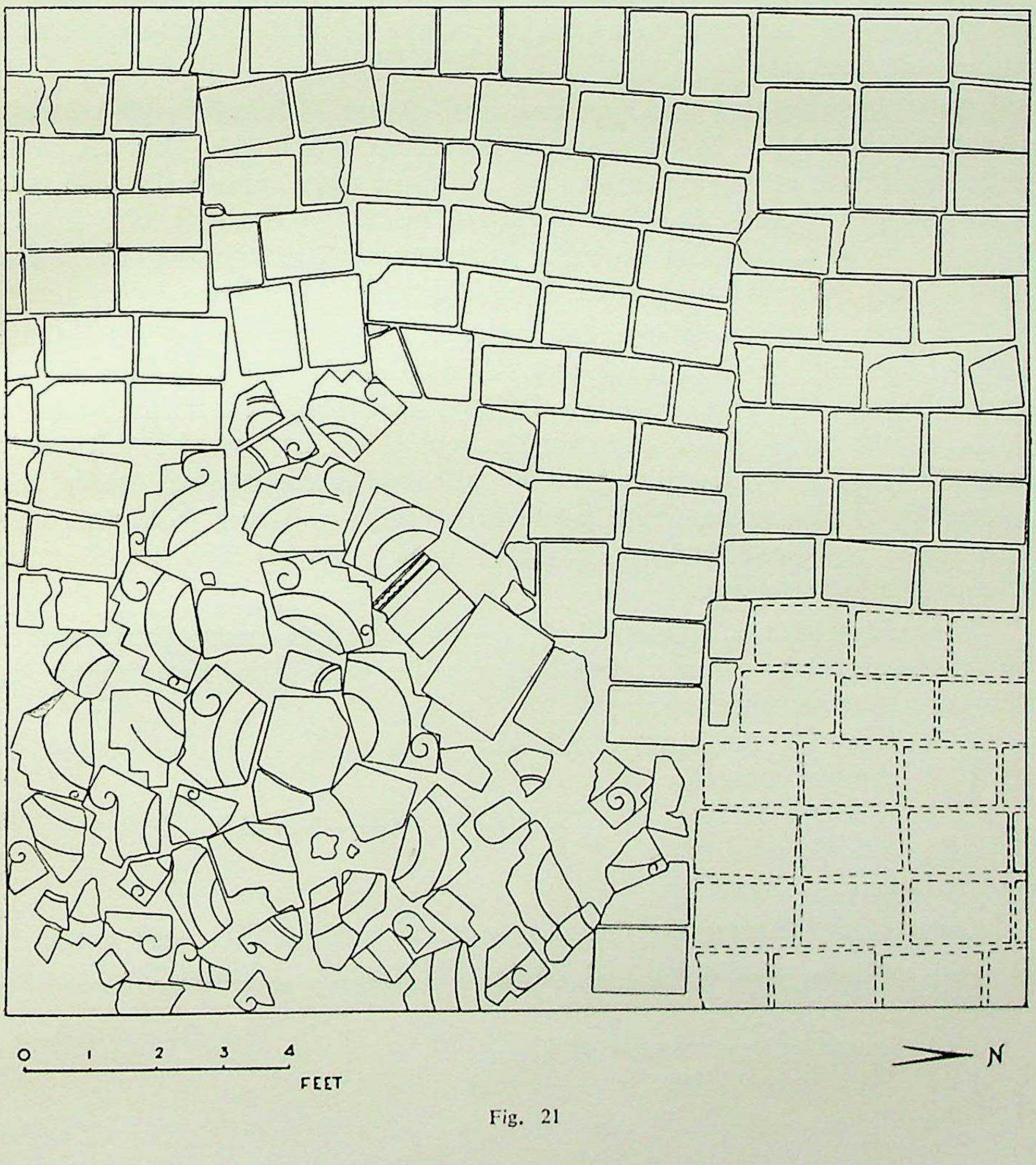

0
1
2
3
4
FEET
N

Fig. 21

This casket was first put in a broken earthen pot and fitted with small brickbats earth etc. (Pl. XVII). Around the casket the bricks were running in volutes (Fig. 23 and 24).

Above the casket also the volutes continued but one course showed different construction (Fig. 25). Here the bricks were arranged diagonally across the drum and the outer side was covered by circular course. Above this course the usual features continued.

On 114th course of bricks an image of Dhyani Buddha was placed facing east (Pl. XVI B and C). It was covered by eight courses of bricks. Over this image, the drum arose to other eighteen courses, but those course above 129 were much broken due to vegetation and natural factors, hence, it was not possible to judge the nature of the construction from this point onwards upto the top. From these eleven courses decorated bricks were obtained mixed with ordinary bricks.

The study of all the internal features reveals that the core was not disturbed at a later age and, therefore, it not only shows the constructional features but also helps in the study of the art of the period of its construction. The decorated arches, bricks and other material obtained from this part of the drum show that it was the damaged or overburnt material that could not be used on the exterior. It was, however, not thrown away but carefully laid in the stupa to save it from destruction or sacrilege. Another interesting fact to be noted is the use of bricks of various dimensions at the same time.

The study of the well-preserved parts of the stupa is necessary for reconstruction of its external appearance. The base upto the *pradakshina-Patha* showed the following successive constructions:

(1) Lower upright courses of bricks
(2) Circular moulding
(3) A course of bricks with right-angled notch forming a type of antarala.
(4) Pilasters, and bays.
(5) Circular moulding.

Over these structures the *Pradakshina-Patha* is laid. This unit marks the first tier. On the second tier the undamaged portion indicates the following features:

(1) Lower upright courses of bricks
(2) Circular moulding

DEVNIMORI 1962-63

PLAN SHOWING THE CASKET INSITU
(STUPA)

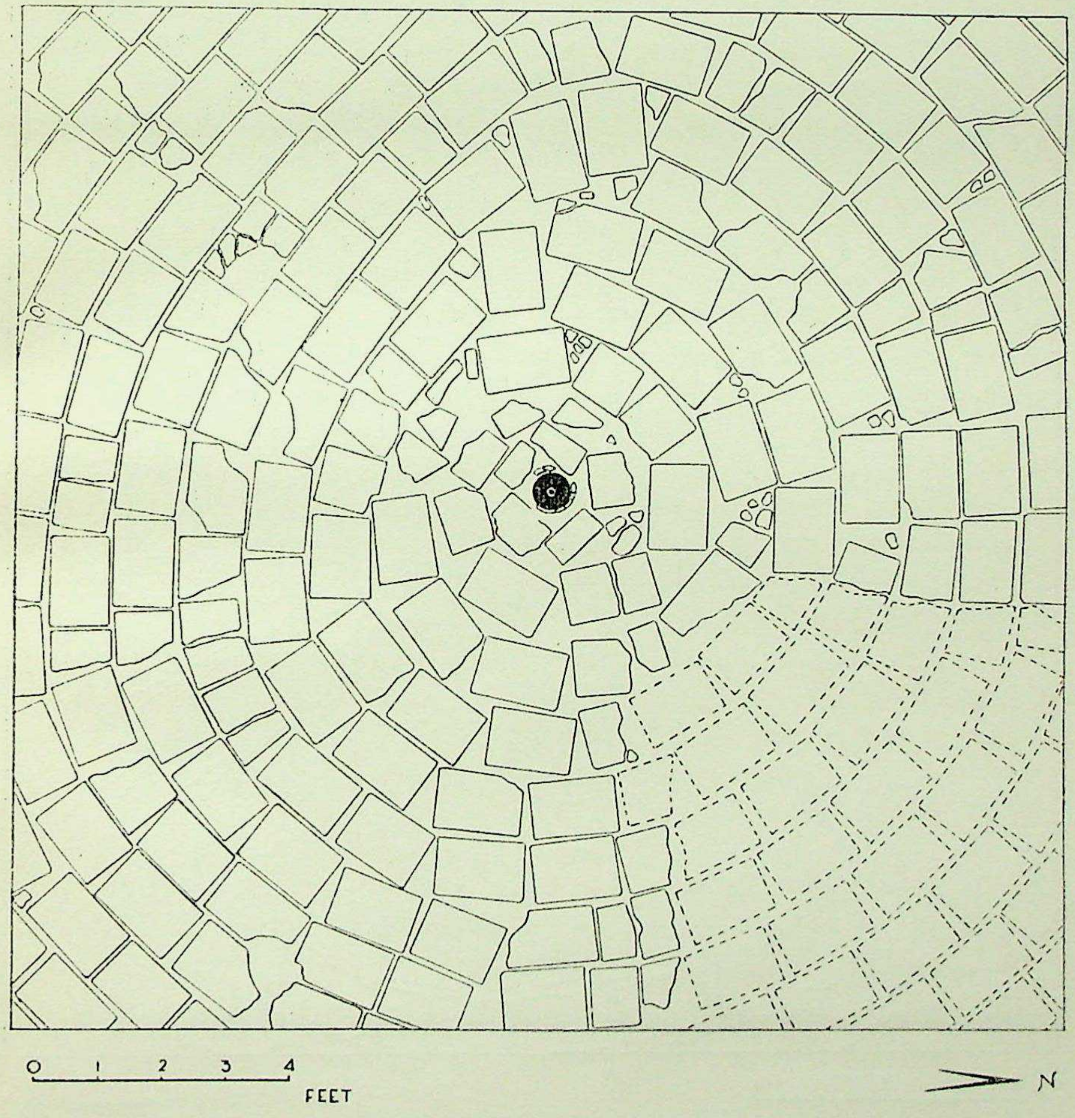

0
1
2
3
4
FEET
N

Fig. 23

DEVNIMORI 1962 - 63

PLAN SHOWING THE CASKET COVERED WITH BRICK WORK

(STUPA)

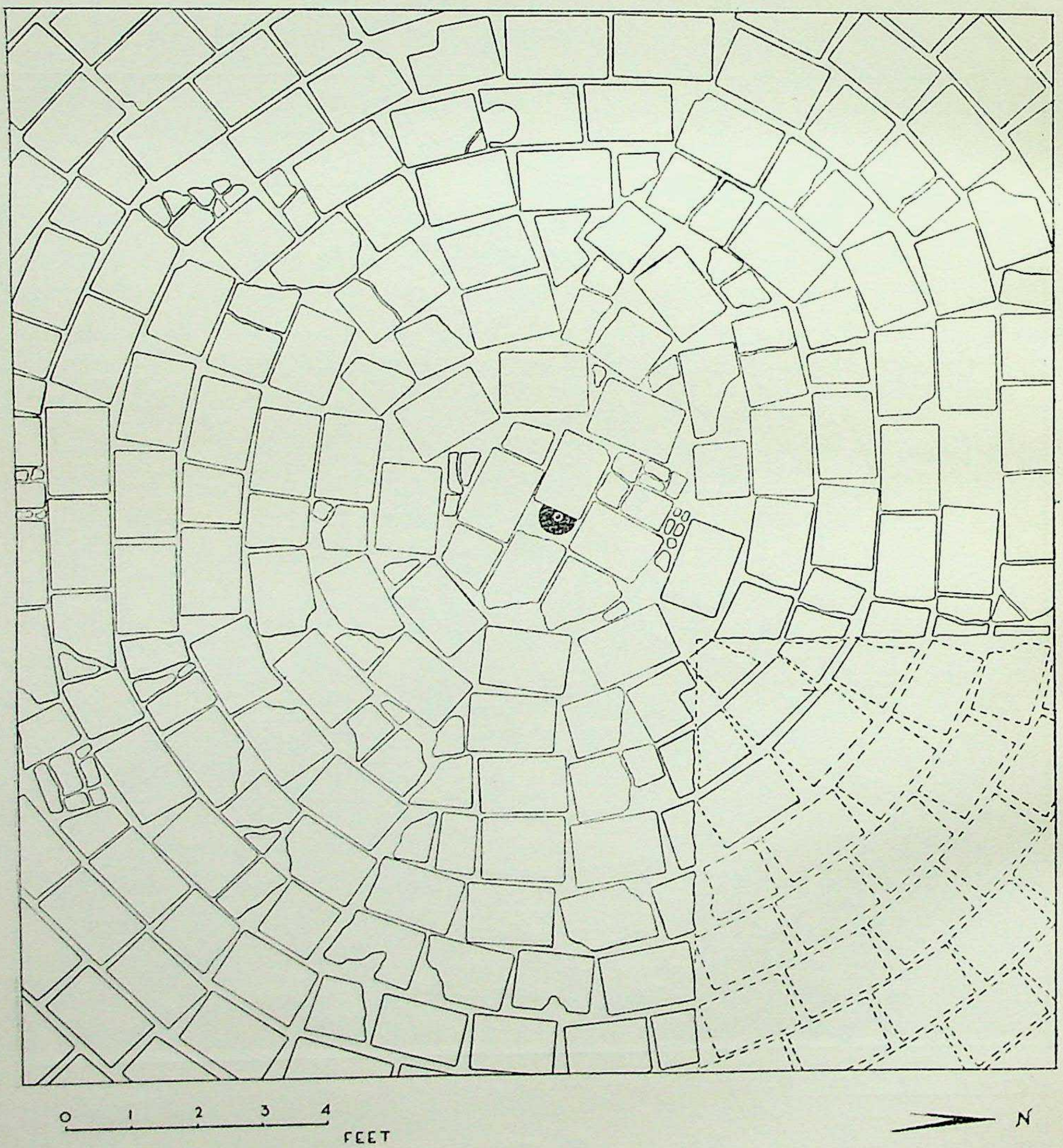

0
1
2
3
4
FEET
N

Fig. 24

DEVNIMORI 1962-63

PLAN OF THE DRUM SHOWING DIAGONALLY LAID BRICKS WITH CIRCUMSCRIBED CIRCLE (STUPA)

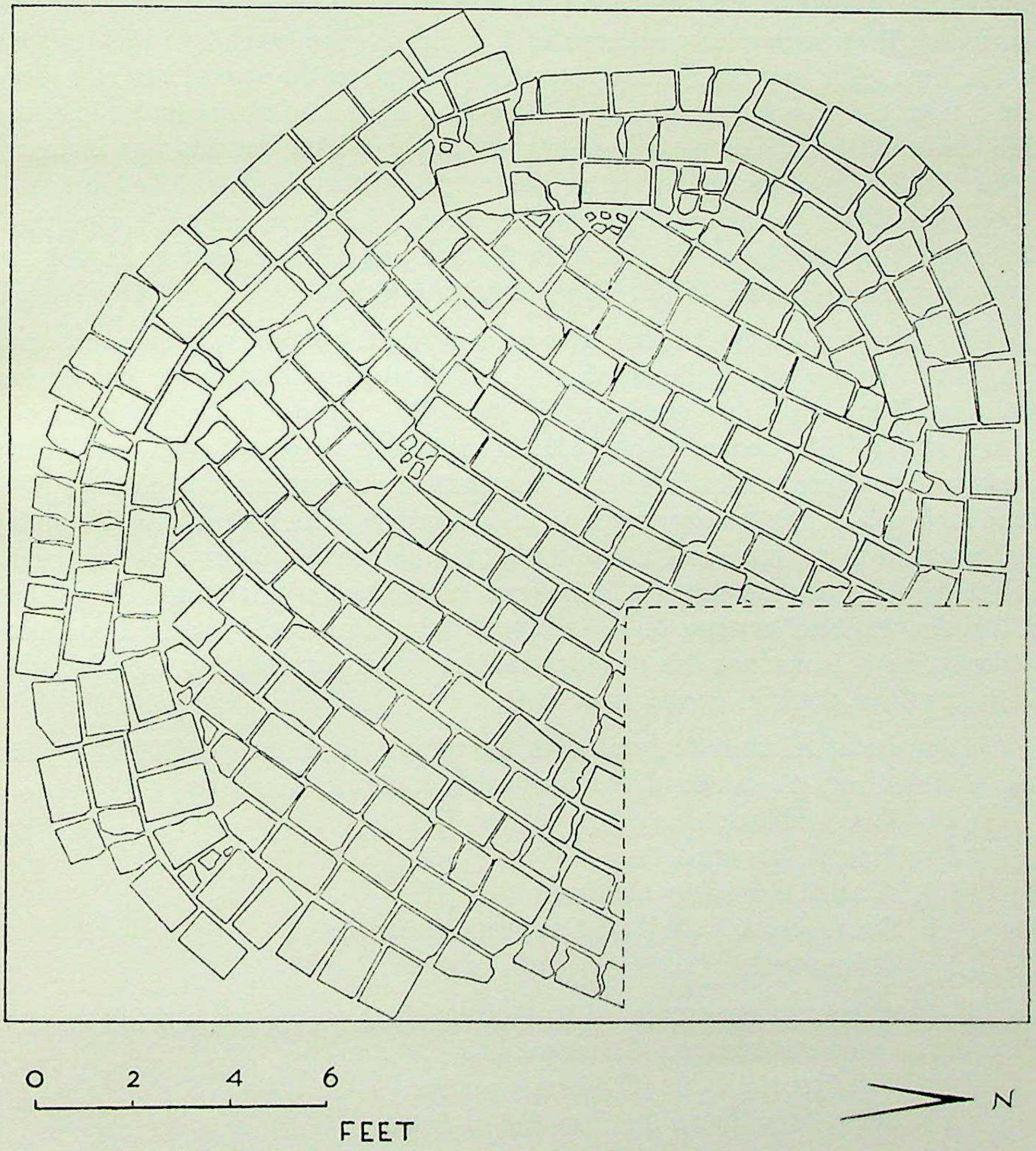


Fig. 25

(3) A course of bricks with right-angled notch forming a type of antarala
(4) Bases of pilasters, stilted arches and niches.

From the debris that seem to have fallen from the upper part bricks with decorations, similar to that found on the upper moulding on the first tier were obtained. They suggest the existence of a round cornice similar to that existing on first tier. The measurements of the bases, *in situ* on the second tier and those found from the first tier are uniform. The other units also show similar features. Only the lower cornice of the second tier was rather thicker but this was necessary to raise the height of the courses below the images, so that the feet of Buddha could be brought almost to the eye level of the visitors. All these features suggest that the second tier was about 2′ higher than the first one. This would mean that the square portion rose some six feet higher above the niches.

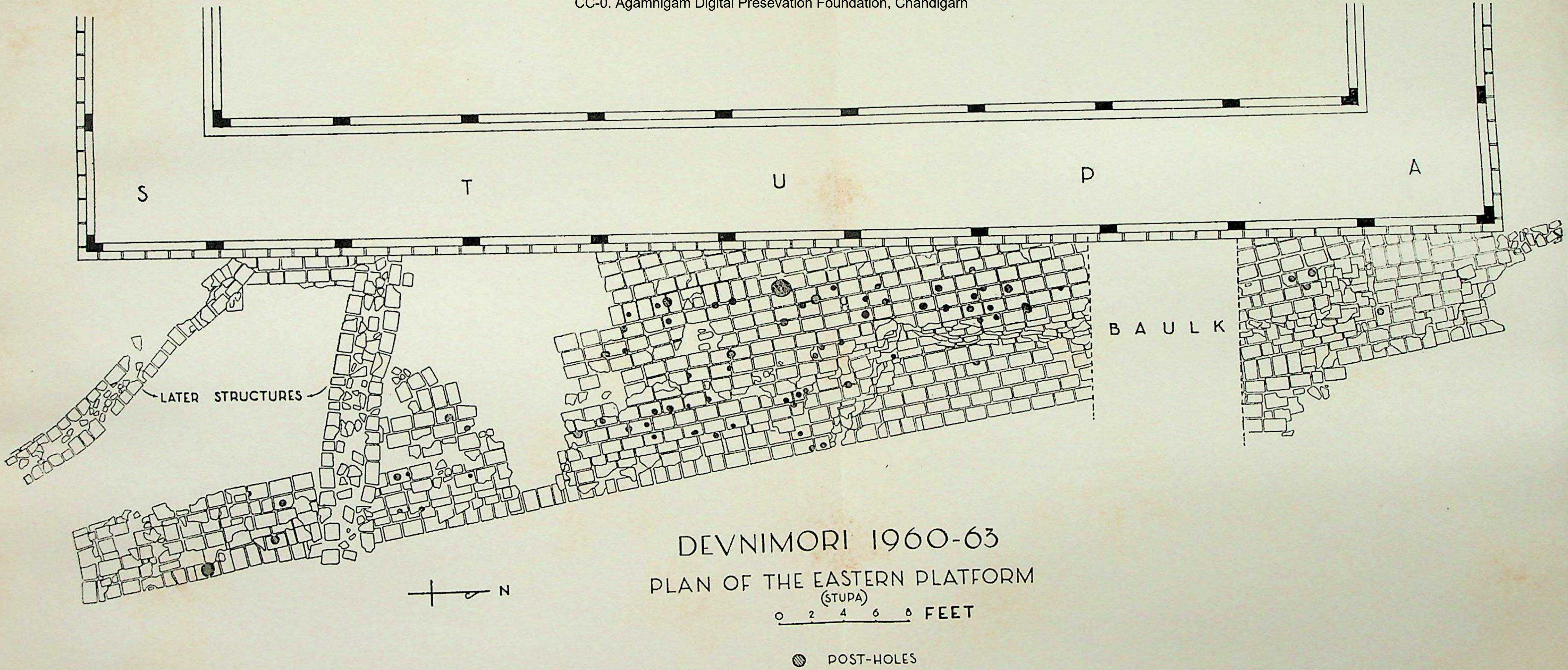
The receding face of the stupa above the niches suggest the existence of a small tier. The diameter of the drum was 54′ . This suggests that it was constructed over a small tier which had the length of about 54′ . The first tier of the stupa is 86 feet square. The second tier receded 8′ back from it on all sides, and hence, measures 70′ square. The diameter of the drum again recedes to a distance of 8′ from each side. This measurement is in conformity with that of the beginning of the second tier. The point above the niche also recedes about 8′ on each side. This is the third tier which might have served as the base of the drum. The height of this tier was smaller than both the lower ones. Due to the damaged condition of these tiers it is not possible to judge the decorative features, but they might be similar to those obtained at the lower level.

Comparison of these features with the terracotta plaque (Pl. XVIII B) that was obtained near the stupa shows interesting features. It shows

(1) Base and first tier
(2) Second decorated tier
(3) A small tier below the drum
(4) Drum showing the casket as semicircular design
(5) *Chhatravali.*

If these features are compared to those existing on the stupa a full or complete picture seems to emerge. The stupa had

(1) The first tier below *Pradakshina-patha*
(2) Second tier above the *Pradakshina-Patha*


S T U P A
LATER STRUCTURES
BAULK
N
0 2 4 6 8 FEET
POST-HOLES

DEVNIMORI 1960-63

PLAN OF THE EASTERN PLATFORM (STUPA)

Fig. 26

(3) The receding features above the niches indicating the presence of 3rd tier.
(4) Drum
(5) *Chhatravali* (not found).

The stupas with three tiers were not unknown in ancient India. The stone plaque from Ghantasila now preserved in Musee' Guimet (Pl. XVIII C) (M.G. 11851), as well as the designs of the stupas from Mathura show this pattern.[1] (Pl. XVIII A). This is the early form of stupa raised on multiple terraces, which find a great development in Paharpur[2] and Java[3]. An early variant of this type is seen at Lauriya Nandangah and is dated in the early centuries A.D.[4]

The Eastern Platform

Towards the east there is a regular platform (Fig. 26) running slightly obliquely to the stupa. On the eastern side the base of the stupa shows 5 courses instead of 6. Below this, there are 3 courses spreading out towards the east. Beyond them is the oblique platform. This platform is 12′-10″ at its broadest part and runs upto the whole length of the stupa. This platform had 14 courses on one side and 17 courses on other side. This is due to the basic difference of the level. This whole platform was probably under the ground level and was possibly a protective wall on the east. This platform is partly mutilated. On it are many irregular post-holes. These post-holes suggest that they might have been excavated by the pilgrims for fixing the flag-posts. Some part of this platform is already destroyed. Towards the southern side of this platform two walls have been built running across it and touching the stupa. (Pl. XVIII D and XIX A). One of the walls is 18′-8″ long and 3′-6″ broad. There are 4 course of bricks. It touches the stupa at a level over the circular cornice. The other wall touches a little above, near the base of the pilaster. It runs to a length of 13′-6″ and is 2′-2″ broad. Both these walls show below them the fallen debris and the decorated bricks, that are used in them, are out of context. These two walls are a later addition and might probably have been built for carrying steps over them. Here the stupa itself shows the evidence of breakage and consequent receding. On the eastern side the foundation of the stupa seems to consist of brickbats and mud. They were overlaid on black natural earth. The eastern lower platform moves to the north-east corner and there joins the protective wall of the north

---

[1] SHAH U. P., *Studies in Jain Art*, Pl. II, Fig. 6.
[2] *Archaeological Remains Monuments and Museums*, Part I, p. 89.
[3] *Ibid.*
[4] *Ibid.*

The liaison, therefore, suggests that this platform also was built for protecting the structure. It is further corroborated by the existence of rain-washed gravels that might have been brought here by some of the surrounding streamlets. The eastern platform joins the stupa and seems to belong to the original plan. The platform is 88′-0″ long and is broken at the north-eastern corner. This break is 10′-6″ broad.

Votive Stupas

There are four votive stupas towards the west of the main stupa. The one on the south-eastern side has six courses intact and it is 8′-6″ square. The first two courses seem to be the base. Over it is a single brick course. On it, two courses of chamfered bricks are put to form a cornice and over it is a mutilated course of bricks. The bricks of this stupa measure 14″×10″. The upper part of this stupa is totally destroyed.

Votive stupa No. 2

Stupa No. 2 is in the west of stupa No. 1 at a distance of 10 feet. It is 11′-6″ square and consists of six courses, and is built over a brick platform. Brickbats have been used in its centre whereas the bricks are used on the sides. The complete bricks measure 15½″×10½″. Votive stupa No. 2 is a later construction than votive stupa No. 1 which rests on a deposit of mud and gravel which is the foundation of the main one. This suggests that votive stupa No. 1 is almost contemporary to the main stupa.

Votive stupa No. 3

This 8′-3″ square stupa is to the north of the votive stupa No. 1 at a distance of about 59′. Its four courses are visible. It is built over base of brickbats, gravels and mud. Its complete bricks measure 15½″×11½″. In the centre fragmentary bricks were also used. Stratigraphically this stupa may be contemporary with the votive stupa No. 1 and the main stupa.

Votive stupa No. 4

This stupa lies at a distance of about 11 ft. to the west of votive stupa No. 3. Its base is made of brickbats and gravels. Over it, two courses of foundation were raised. Over them there were three more courses, on which two courses of chamfered bricks and one course of fragmentary bricks and decorated bricks is lying. This stupa is 8′-9″ square and made of bricks measuring 16″×11″. On its southern side there are traces of later post-holes.

Pavement

A large brick pavement seems to exist towards the western side of the main stupa. It extends almost from the vihara and occupies the space between it and the protecting wall. This is an even platform of bricks of 15″×10½″, 16½″×11½″, 15½″×10½″, 15½″×10½″.

As this pavement has not been thoroughly opened at all places its size cannot be given.

On this pavement a few structures seem to have been raised.

Structure No. 1

A large structure about 31′-3″ square with a brick platform of 2′-9″ projecting on all sides. Bricks have been robbed from the central part of this structure (Pl. VI A). But whatever little evidence remains suggests that the inner part of the structure was also paved. Some parts of its walls have survived. Sixteen courses of bricks of this structure have been noted at some places. After three courses the structure shows a narrow off-set over which other courses are laid. Bricks of the size of 17″×11½″ were observed. The outer verandah of this structure shows numerous post-holes. This is a very well laid out structure.

Structure No. 2

Towards the north of this structure is another wall made of fragments of bricks which are both plain and decorated. This structure is highly dilapidated and is made of brickbats irregularly laid. It seems to be later than the preceding one. Just touching this structure are votive stupas Nos. 3 and 4.

The north-eastern corner of the structure one has preserved the remains of two walls made of brickbats. The one running in the north-south direction is distinctly earlier than the small wall running in the east-west direction.

Chaitya

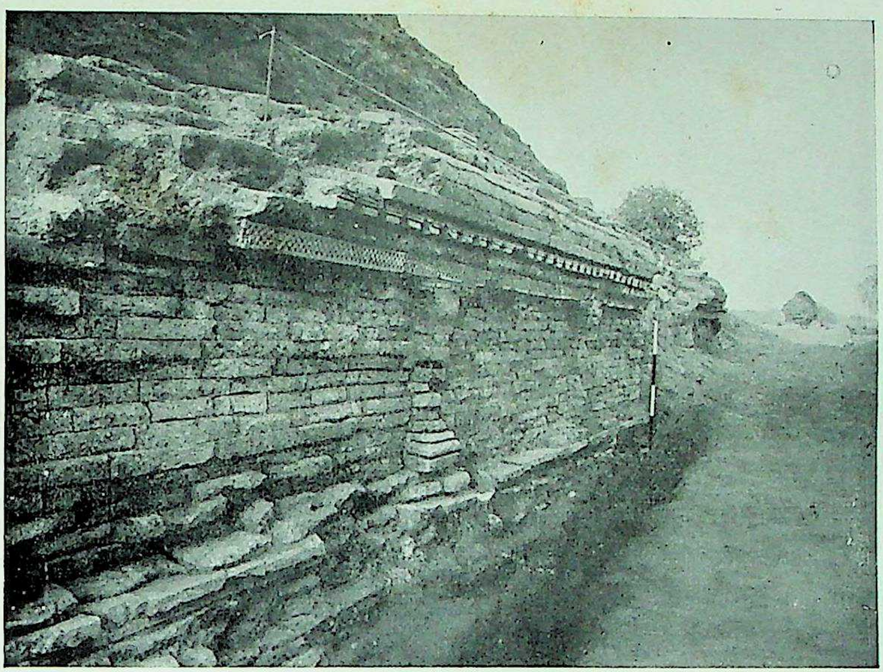
On the south-west corner of the main stupa is an apsidal chaitya. Its foundation consists of river boulders and gravels. On this shallow foundation was built the chaitya. Its base has one course. Over it are five courses. The fifth course has a small receding off-set on which the sixth course is also similarly laid. Above the 6th course remains of six more courses have been noted. The chaitya is partly built of the complete bricks and partly of fragments. The apse is rounded by a few off-sets in the interior. But the circle is not very well made. This chaitya is highly fragmentary (Fig. 5 and Pl. III).

Protective Wall

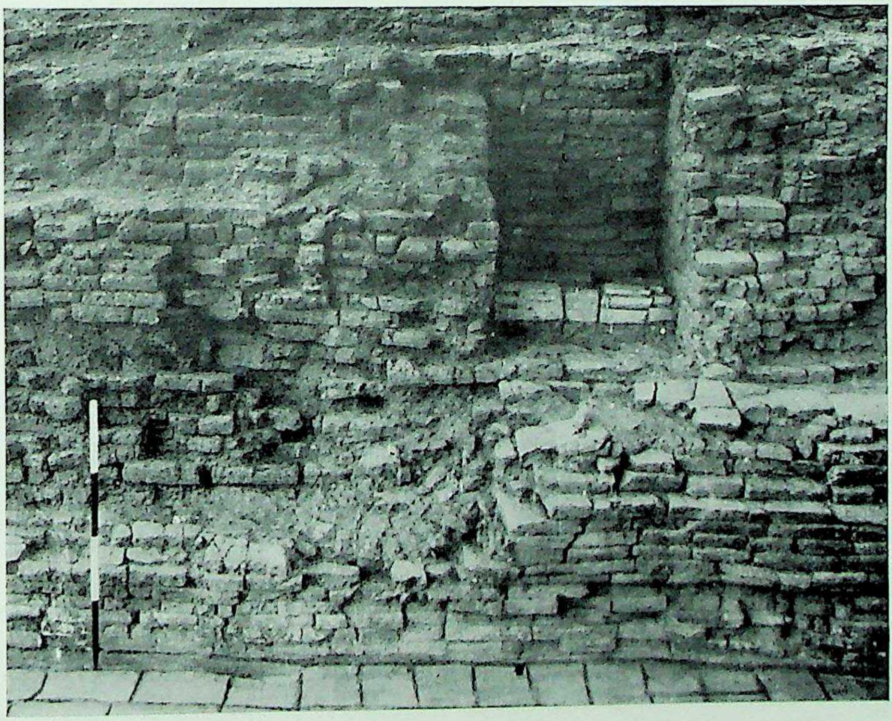
From the north-eastern end of the stupa runs a large protecting wall. This wall is composed of two elements. Its core consists of huge partly dressed quartzite boulders whereas its outer and inner face is finished by bricks. It appears that this wall was built along the side of the river. This wall has three lower courses that are slightly projecting, over them 15 intact courses are running. Over them 20 more courses of bricks are partly fragmentary. The 32nd and 33rd course from the bottom are made of chamfered bricks. At one point there is a gap of about 8′ near the north-western corner of the stupa. This gap is not fragmentary but the cornice turns clearly towards the river side. Does this suggest the existence of the steps leading to the river? The wall rises to the base of the stupa. Originally also it might not be much higher. It runs along the river for a distance of about 340 feet and then turns towards the south where it runs for other 75 feet. Here the stone wall directly rests on black natural earth. It shows off-sets (Fig. 3).

The great precautions taken against water on the east, north and south clearly indicate the experience of the monks staying in the vihara. When they erected the stupa, these precautions were essential. Incidentally it may be noted that in heavy floods, the Meshvo overflows through its banks and runs straight south and empties its waters through the Jitpur Dadhalia gap. Memories of such heavy floods in the past might be responsible for these precautions while constructing the stupa.

PLATE IX

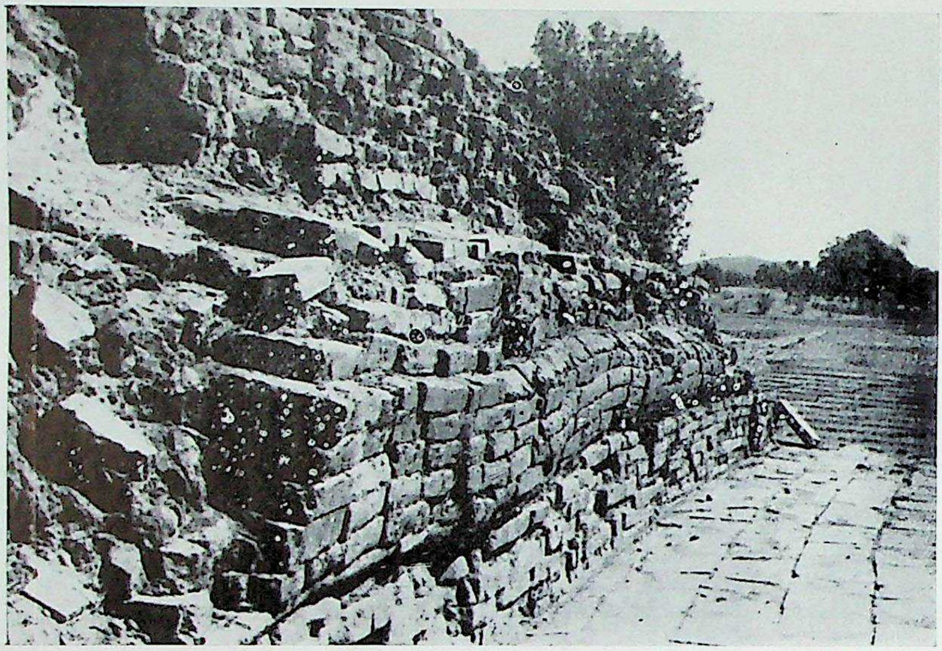


A. Lower part of the Mahastupa, facing south.

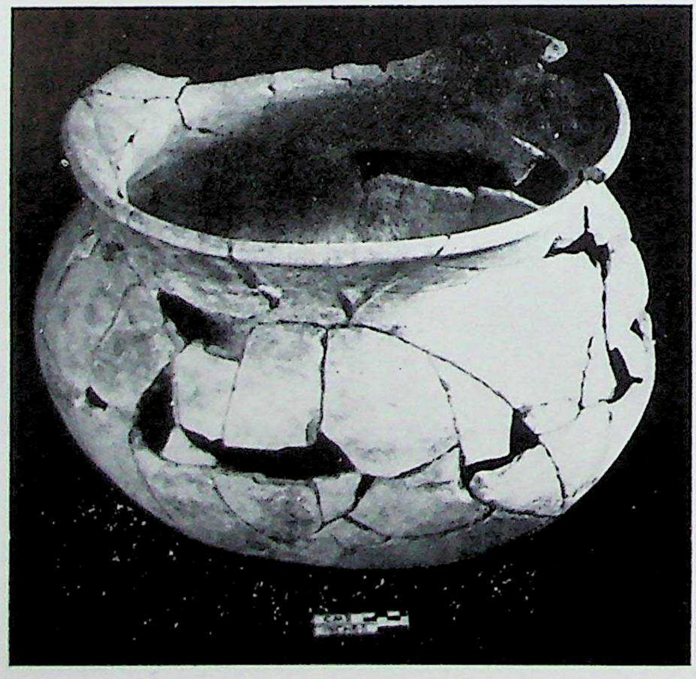


B. A niche with out of context bases, Mahastupa, facing south.

PLATE X

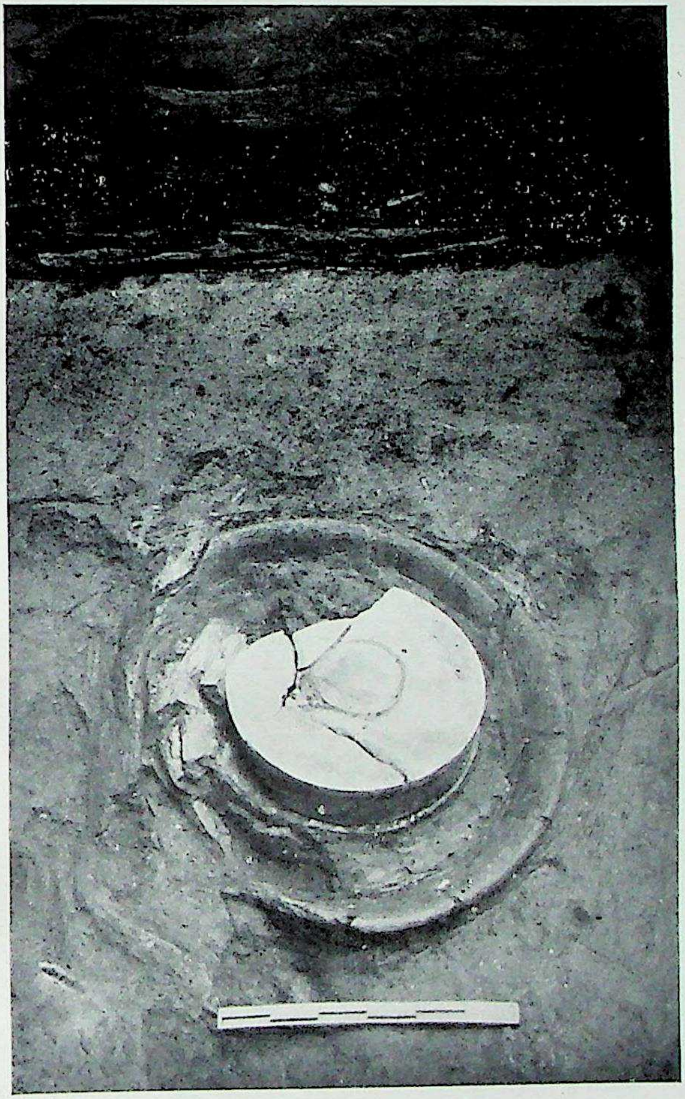


A. Repaired and original moulding above the Pradakshina Patha, Mahastupa, facing south.



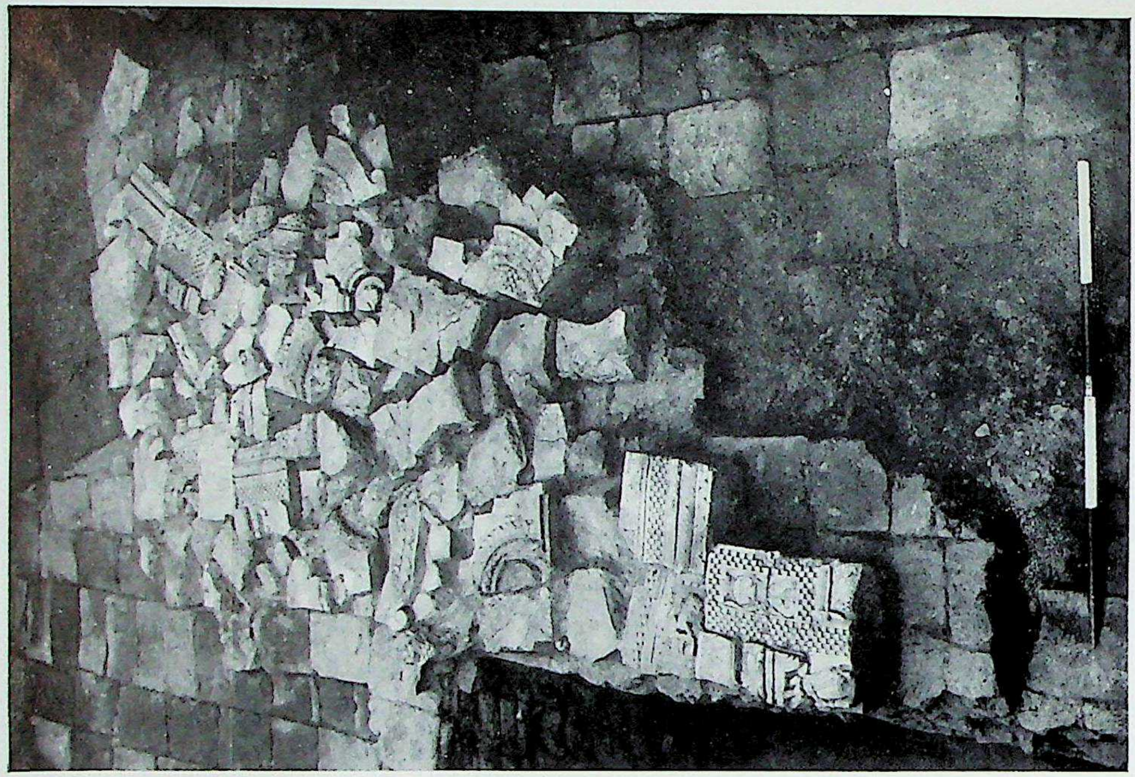
B. Reconstructed pot of Casket I

PLATE XI

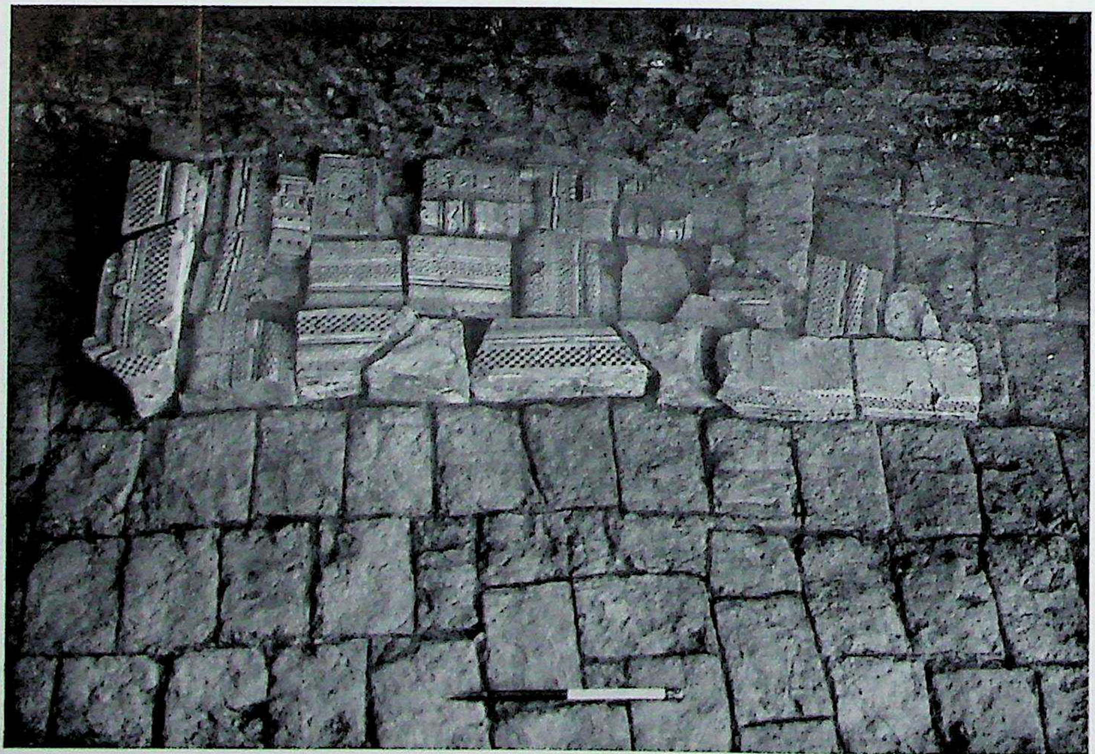


Casket I *in situ,* Mahastupa.

PLATE XII

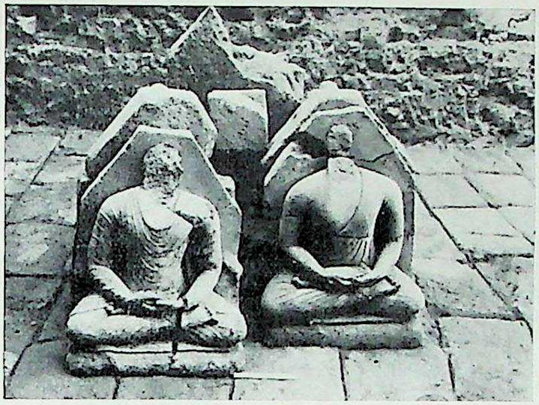


A. Decorated arches, pillars etc. on Course No. 6. Mahastupa.

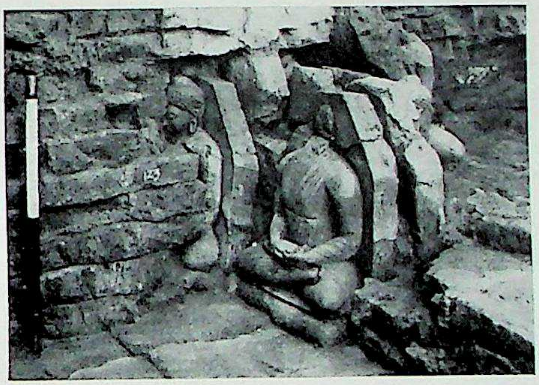


B. Decorated jambs etc. on Course No. 59. Mahastupa.

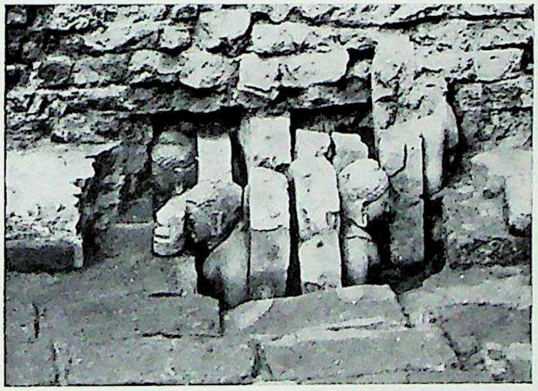
PLATE XIII



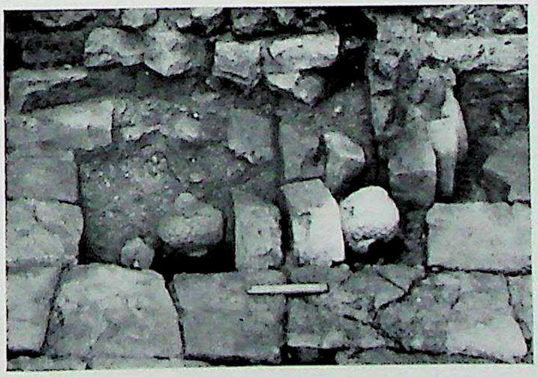
A. Buddha Figures from inside Mahastupa on course No. 13. The heads of some figures are removed.



B. Buddha figures partly exposed, inside Mahastupa.

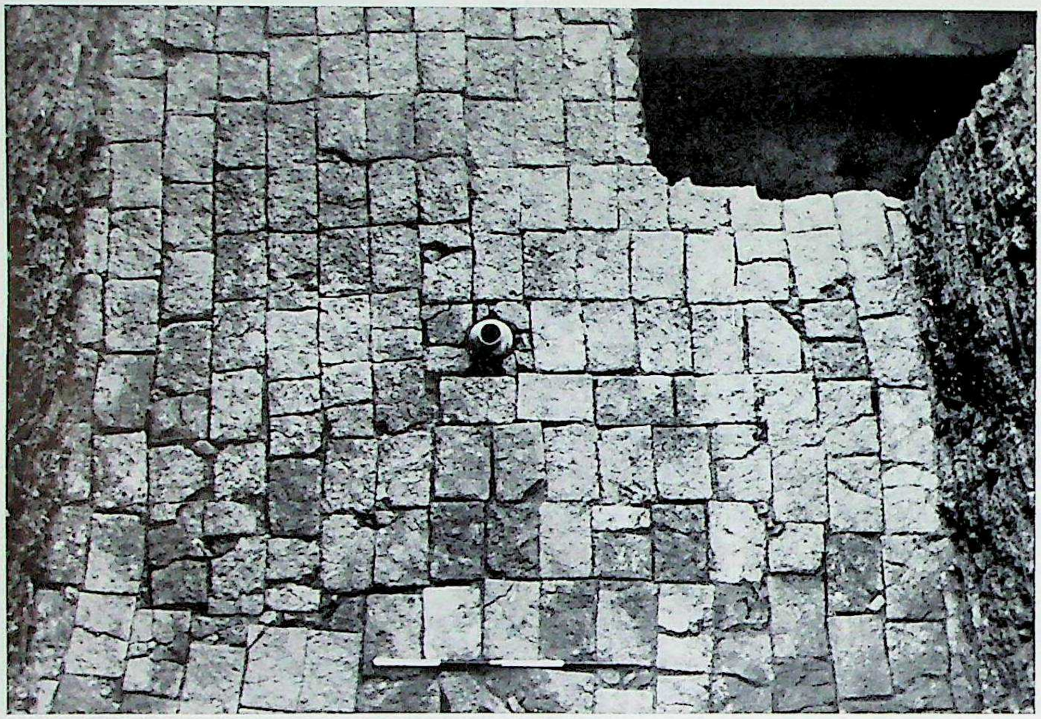


C. Buddha figures partly exposed inside Mahastupa.

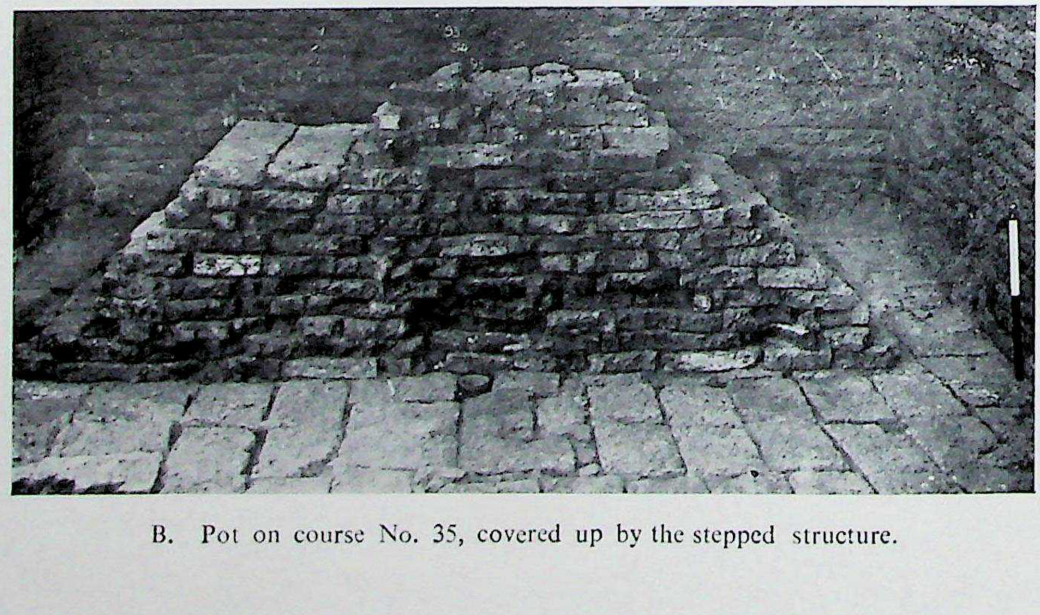


D. Buddha figures as exposed in the beginning. Inside Mahastupa.

PLATE XIV

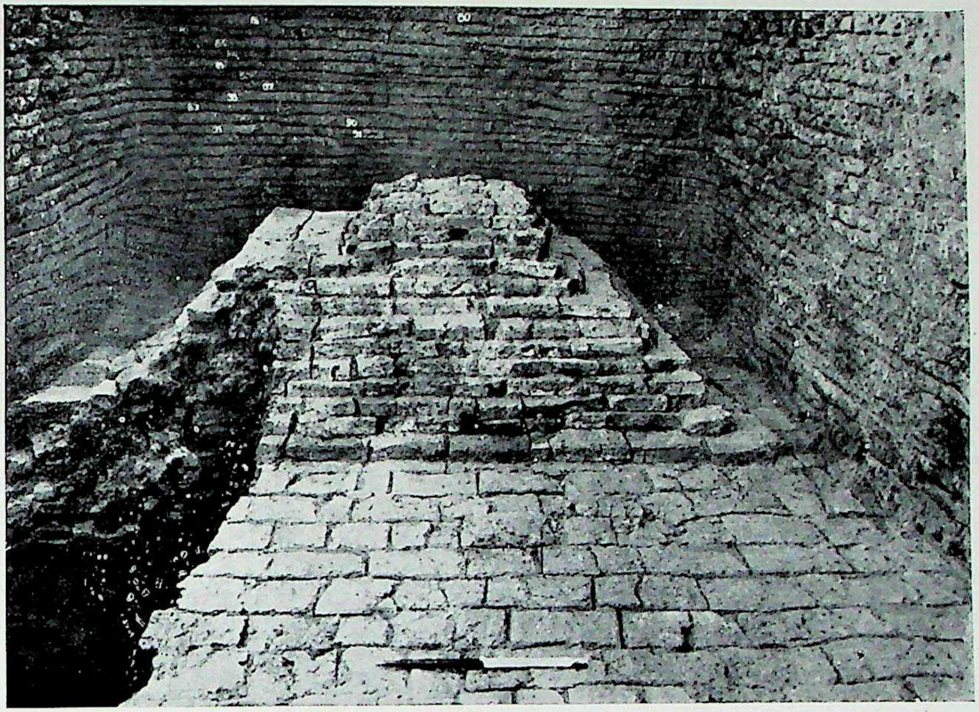


A. Pot with kshatrapa coins as resting on course No. 35 Mahastupa.

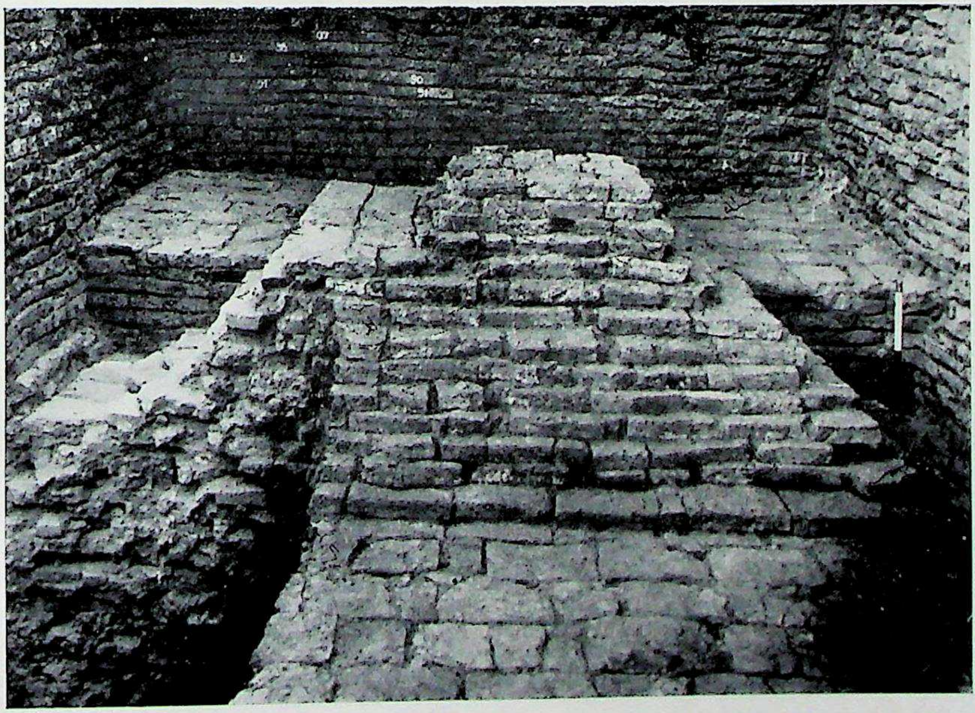


B. Pot on course No. 35, covered up by the stepped structure.

PLATE XV

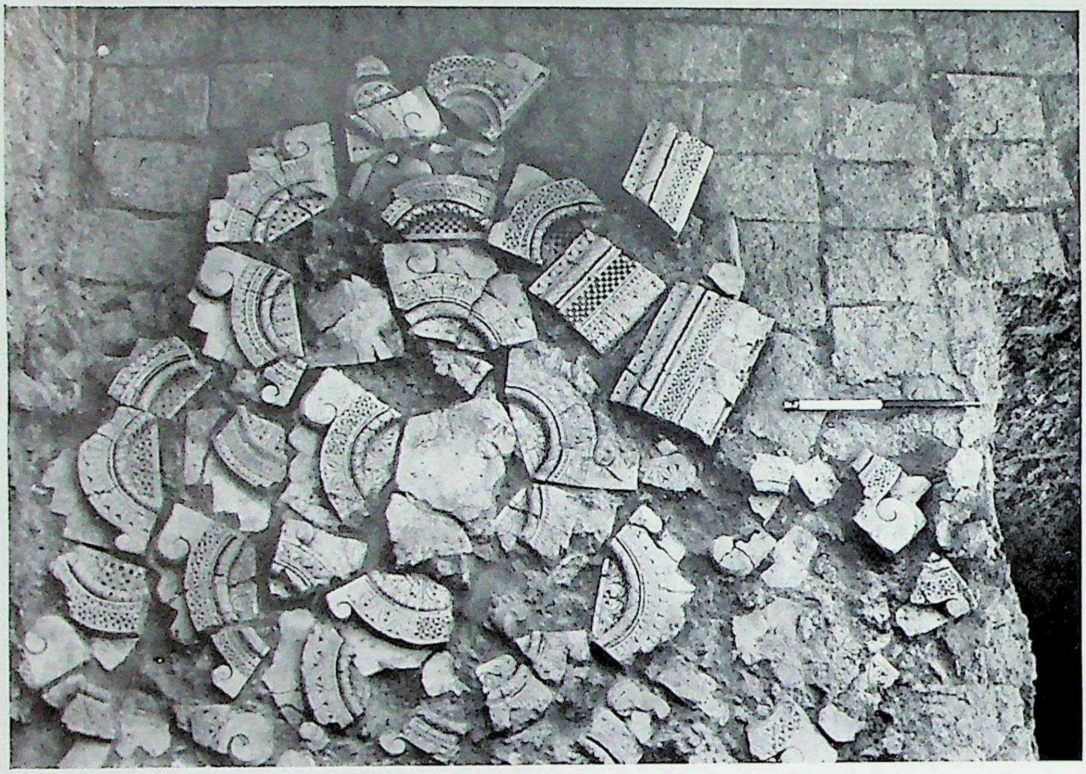


A. Stepped structure inside Mahastupa (After clearance)

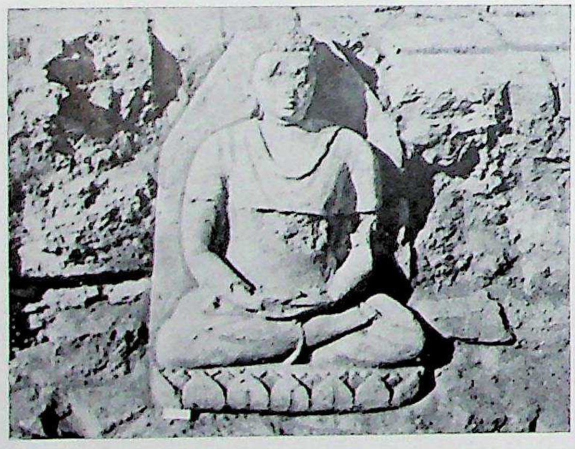


B. Stepped structure inside Mahastupa (partly cleared).

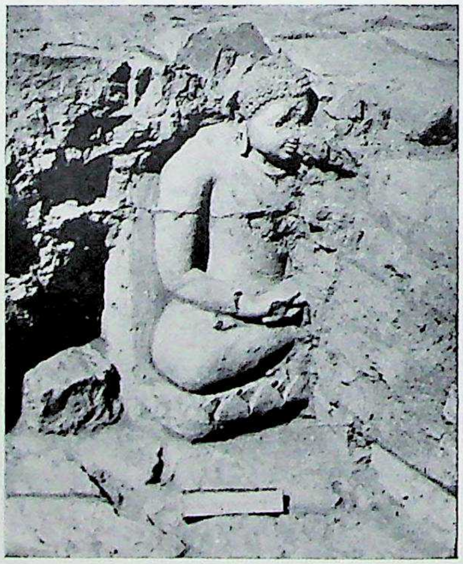
PLATE XVI



A. Decorated arches and jambs on course no. 74. Mahastupa.

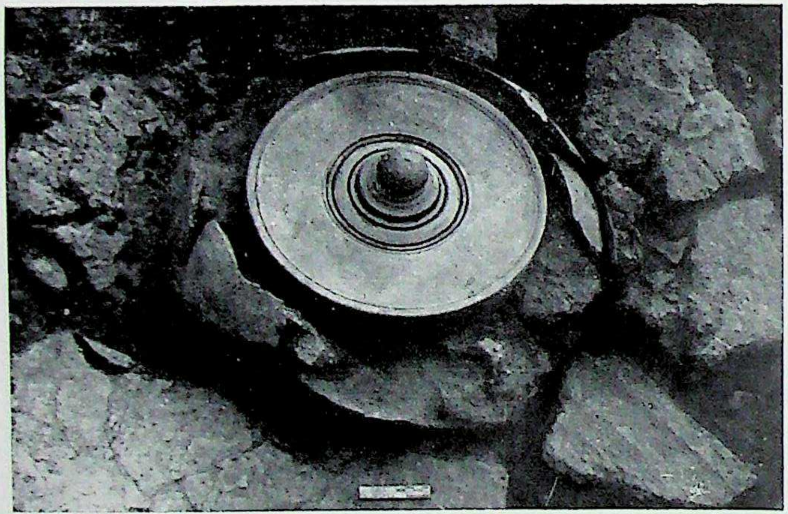


B. Buddha figure from the drum course no. 114, Mahastupa

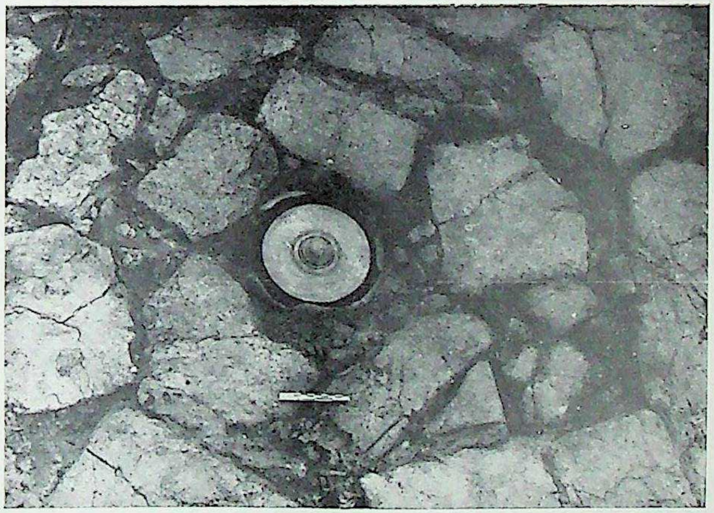


C. Buddha figure from the drum, partly cleared.

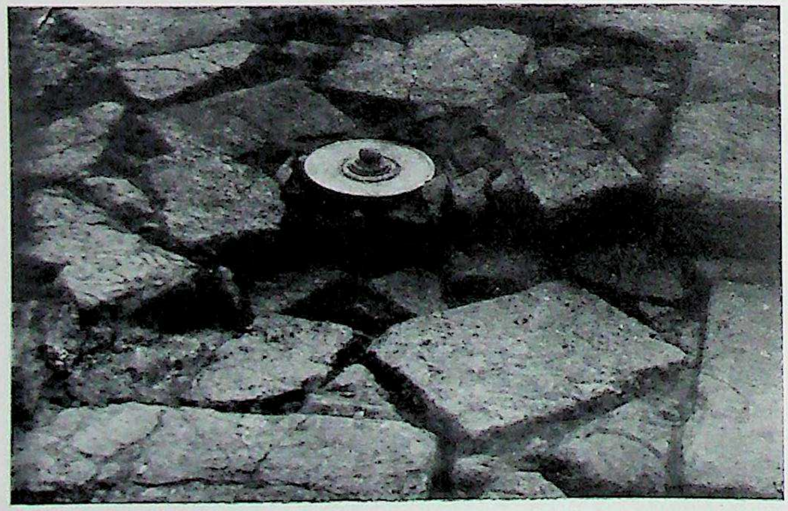
PLATE XVII



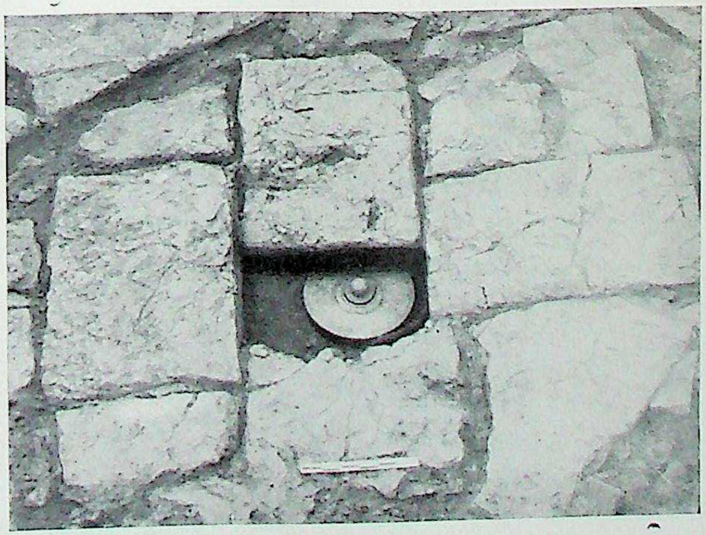
A. Close up of casket II in situ.



B. Casket II as covered up by course No. 95

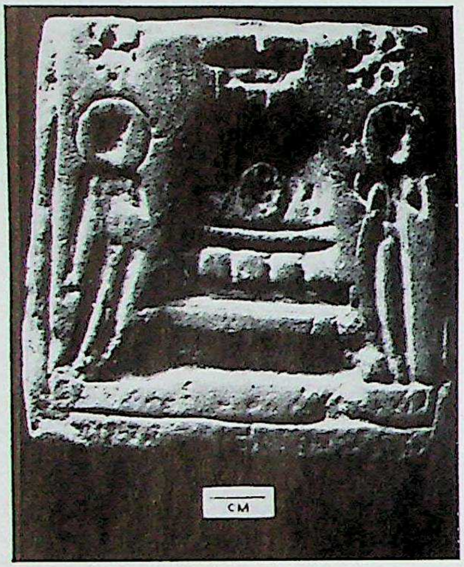


C. Casket II on course No. 94

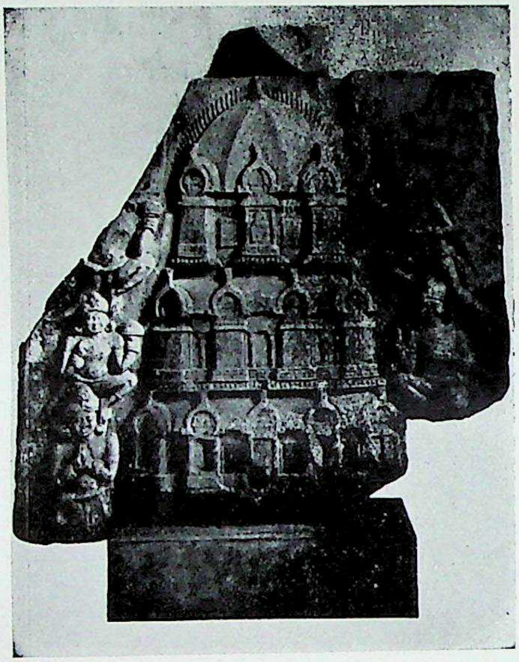


D. Casket II as covered up by course No. 96

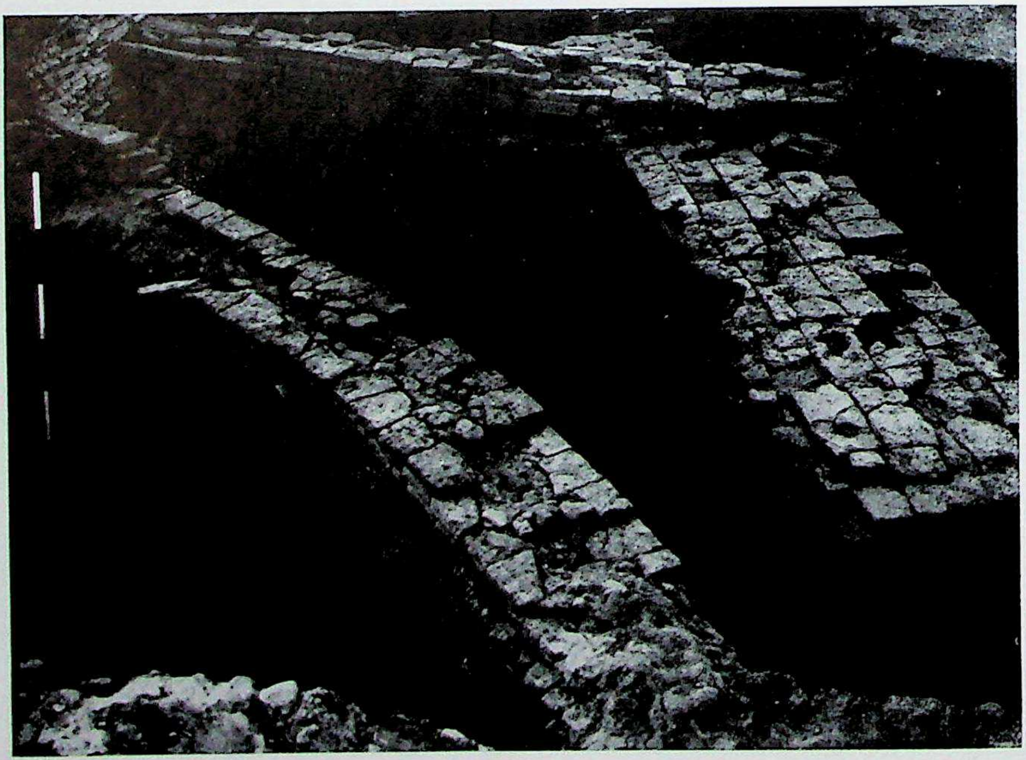
PLATE XVIII



B. Terra cotta plaque from Mahastupa.

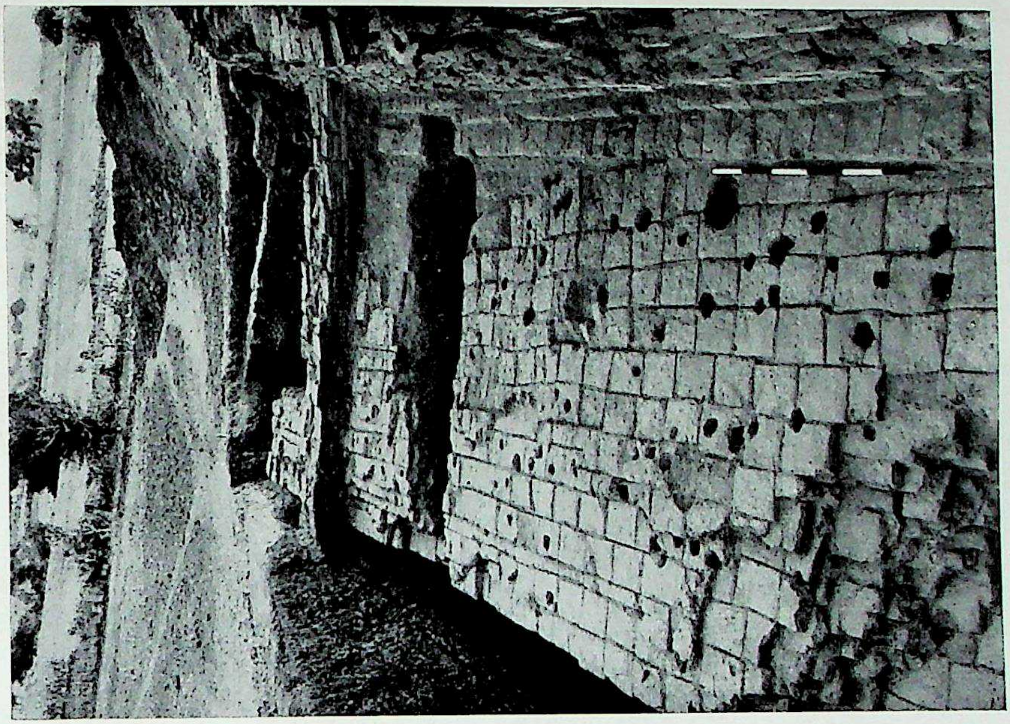


C. Stupa from Ghantasala (courtesy Musee Guimet).

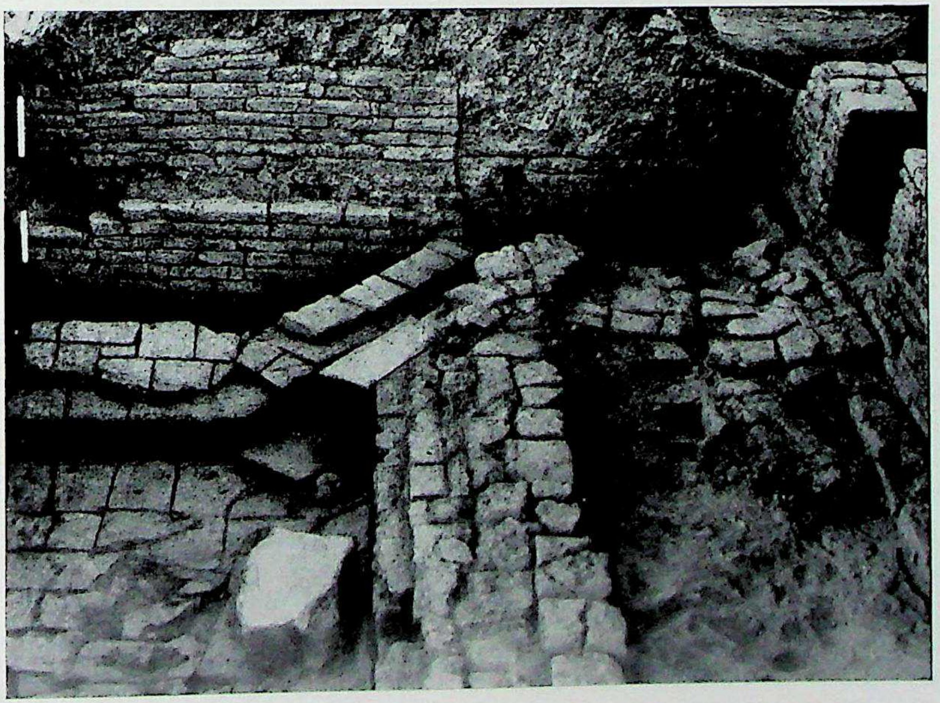


D. Walls on and near the eastern platform of the Mahastupa.

PLATE XIX

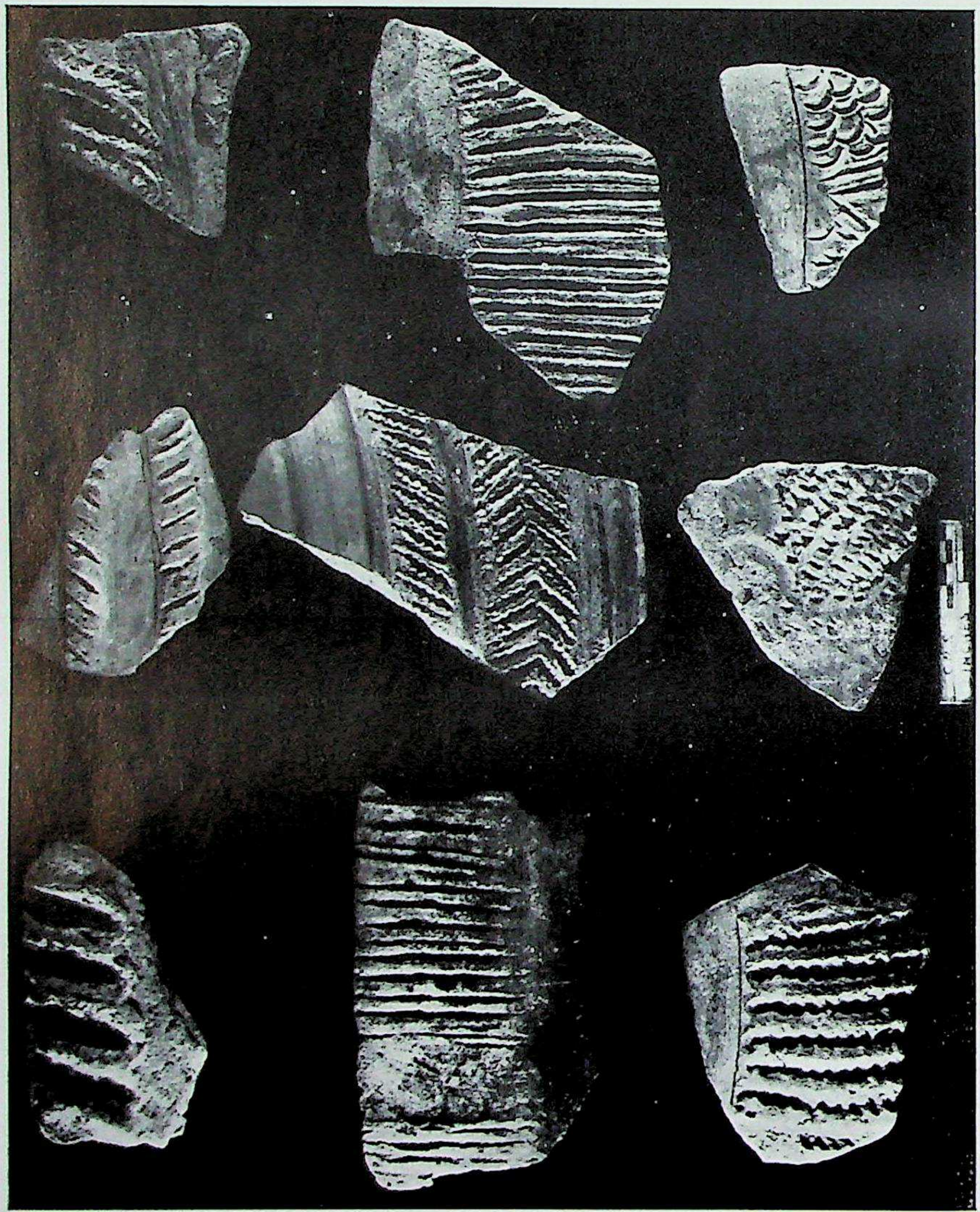


A. Eastern Platform of the Mahastupa, facing south



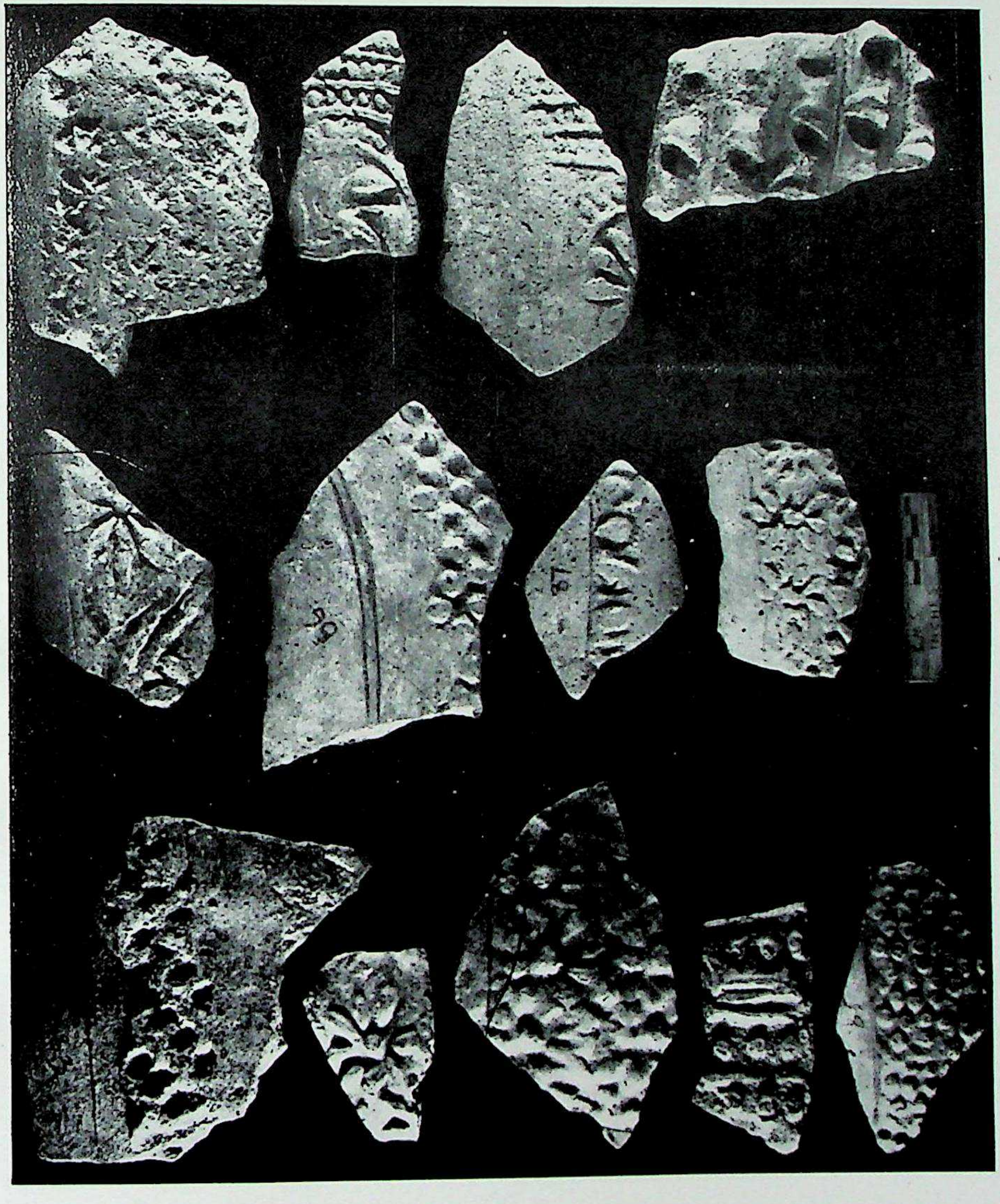
B. Vihara II

PLATE XX



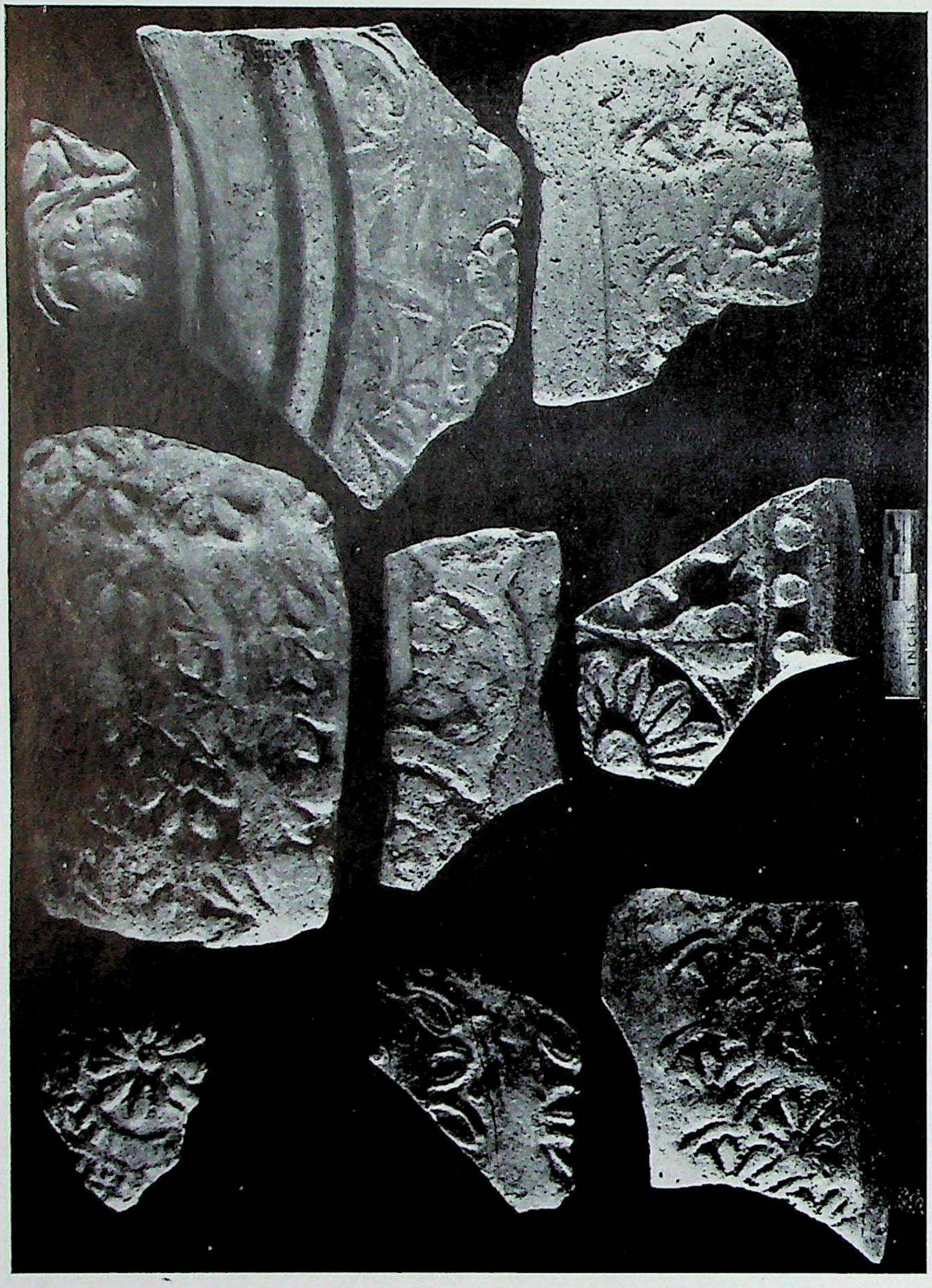
Stamped Pottery

PLATE XXI



Stamped pottery

PLATE XXII



Stamped Pottery

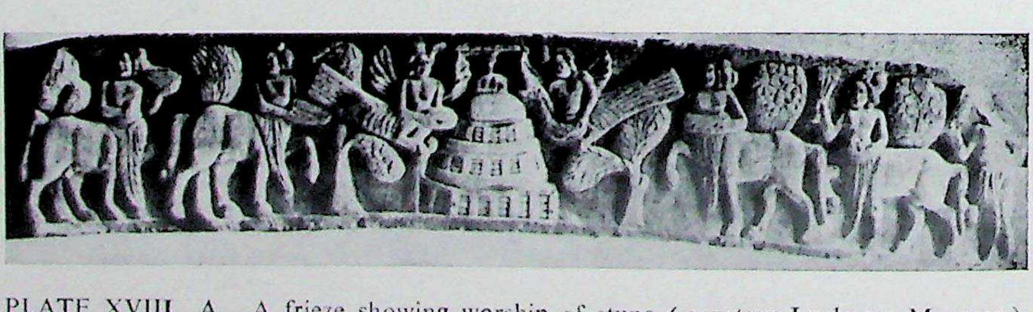
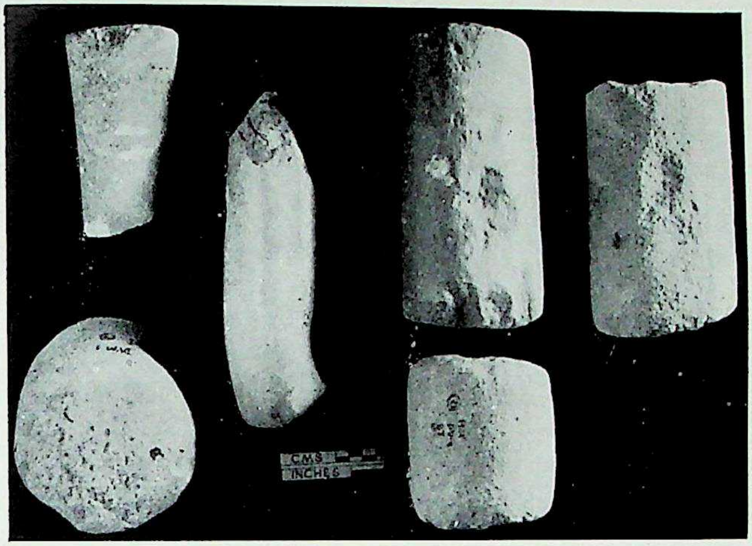
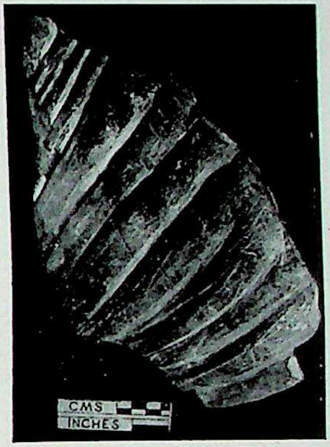


PLATE XVIII A. A frieze showing worship of stupa (courtesy Lucknow Museum).

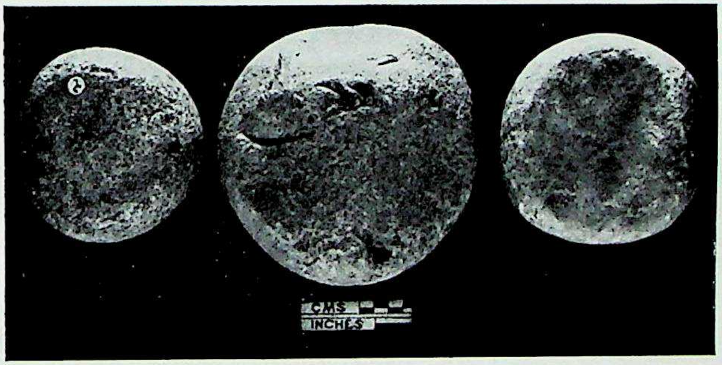
PLATE XXIII



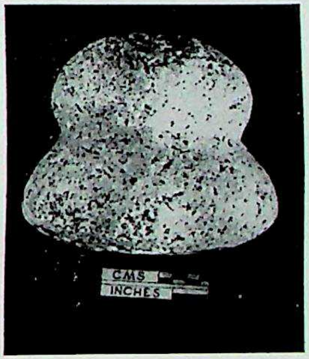
A. Mullers



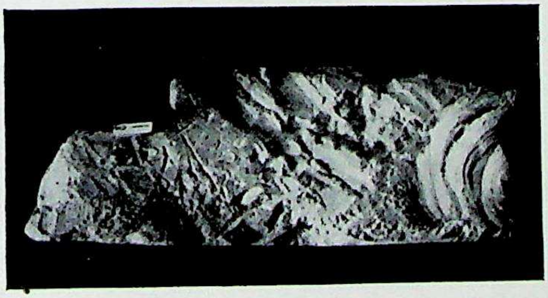
E. Buddha



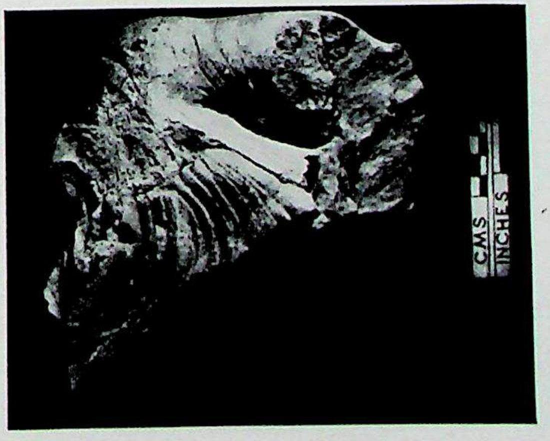
B. Hammer stones



C. Pindlo



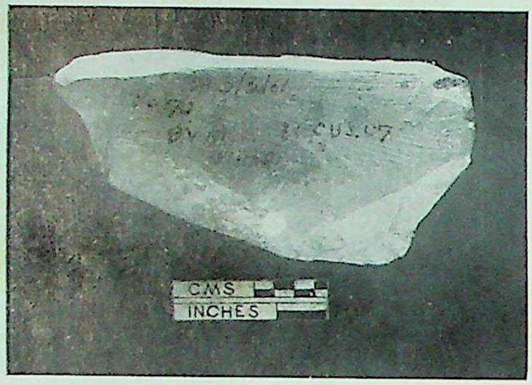
F. Support for the door



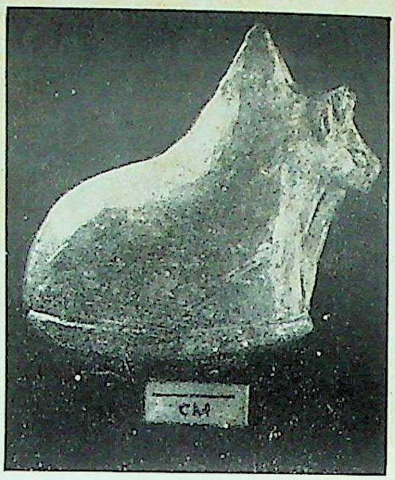
D. Buddha

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

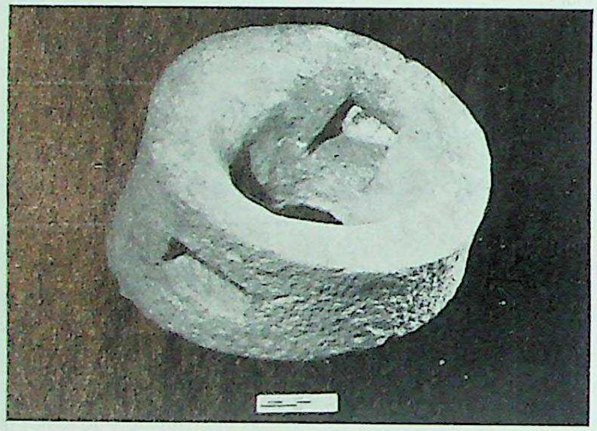
PLATE XXIV



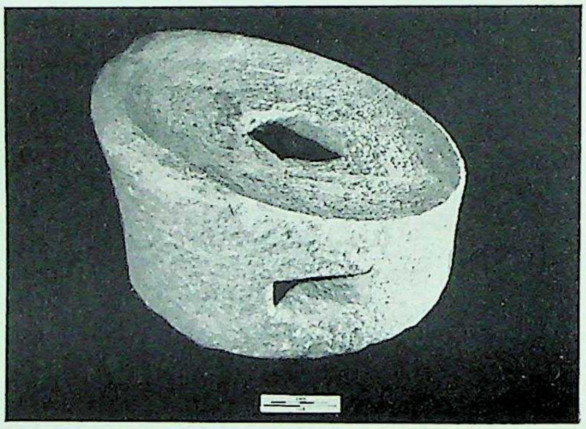
A. Sharpener



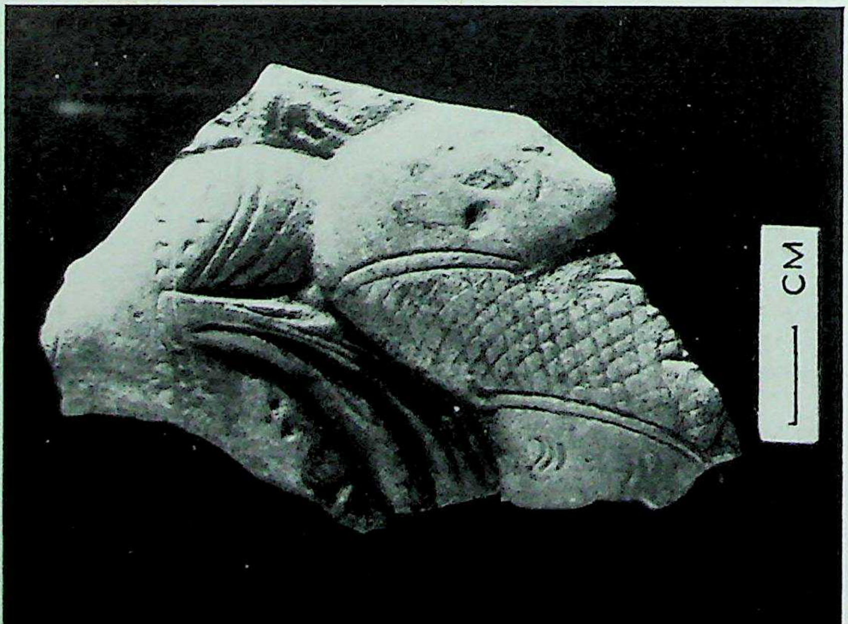
B. Steatite Bull



C. Rotary quern



D. Rotary quern



E. Mahishamardini

Vihara II

Vihara II is about 500′ to the east of Vihara I. It was exposed during last season's (1962-63) excavations. As the aim of its excavation was only an exploratory one, only a small trench measuring 40′× 20′ was laid on the mound which revealed some portion of the south-western corner of this structure. Like Vihara I, this vihara is also a burnt brick structure of mud-masonry. Its bricks measure 16″ × 10½″ to 10″ × 2½″.

Being an isolated structure of mud-masonry it has suffered much from nature. Only 15 to 20 courses of walls are intact, the upper parts of these walls and the roof are completely missing. But from the similar shape and topography of this mound like that of Vihara I it can be seen that this vihara was also a square or rectangular structure with rooms on all four sides opening towards central open courtyard (Figs. 7 and 8).

As it stands to-day, this Vihara has following parts:

(1) Rooms
(2) Inner Verandah
(3) Central Court-yard
(4) Drain and Water channels
(5) Outer Verandah
(6) Steps
(7) Additional Walls.

Rooms

Parts of only two rooms are exposed. They are on the south-western corner of the vihara.

Room No. 1

This is the southern room and it measures 8′-9″ × 8′-0″ and is paved with bricks and brickbats. Its entrance is 3′-0″ wide.

Room No. 2

This room is to the north of Room No. 1 and is separated by a screening wall which is 2′-5″ thick. Only the southern part of this room is exposed, hence, only its east-west length (8′-0″) can be measured. Like room No. 1 the floor of this room is also paved with burnt bricks and brickbats.

Inner verandah

The verandah is composed of six courses and is 1′-6″ high and 2′-8″ broad. It is separated from the wall of the room by a yellow kankary filling which seems to be a part of inner ramming of the verandah itself.

Central Court-yard

Only some portion of the central court-yard is exposed. It is paved with diagonal courses of burnt bricks.

Drain and Water Channel

For the outlet of monsoon water a drain (Pl. XIX B) similar to the drain of Vihara 1 is provided in the south-western corner of the court-yard. This drain is 11″ broad at its mouth. It narrows down as it goes towards its end towards west. It is composed of schist slabs, whole bricks and even brick-bats. Near its mouth, its floor is paved with well dressed and polished schist slabs. Like the drain of Vihara 1 this drain also might have been a covered one.

Some traces of a water channel about 5″ broad and 2″ to 2½″ deep were noticed on the verandah. It runs along the breadth of the verandah.

Outer verandah

Eighteen courses of the outer verandah of this vihara are intact. It is 3′-1″ broad and seems to be running all around the vihara. Its outer face is decorated with an off-set on its ninth course, and a decoration of horizontal band of saw-tooth design near its top angle.

Steps

Parts of four steps are exposed in the section (of trench) facing south just on the outer verandah. In all 17 courses of these steps are exposed. Two courses of each step are visible in the section. From this evidence it can be assumed that the main entrance of this vihara faced Mahastupa *i.e.* west.

Additional Walls

Parts of two walls at right angle to the outer verandah of the vihara were exposed to the west of the vihara. These walls seem to be parts of some other structures built after the construction of the vihara proper. This is evident in their brick sizes (15″ × 10″ to 9½″ and 14″ × 9″) which differ from the brick sizes of the vihara.

Appendix

Calculation of materials and man power used for building of the Mahastupa.

As the Mahastupa was built at one time and in the present state it is fairly well preserved for a large part, it would be worth while to consider the materials and labour that might have gone into its construction.[1]

The dimensions of the stupa are 86′ × 86′ × 8′ for the Ist platform. 70′ × 70′ × 10′ for IInd platform. 54′ × 54′ × 6′ for the IIIrd Platform and a solid drum with 54′ diameter and 13′ height. This is a solid construction of bricks of an average of 16″ × 10″ × 2½ ″. These bricks are about three times in size as compared to the modern bricks of 9″ × 4½″ × 3″.

For raising the stupa, about 140,000 cubic feet of brick material *i.e.* about 500,000 bricks is necessary. The average working capacity of a team of 3 brick manufacturers to-day is to work up about 750 cubic feet of material or roughly about 250 bricks of the size used in the stupa per day. This would indicate that the work of brick making for one team would continue for 2000 days *i.e.* roughly six years.

The average time taken for completing the brick manufacture is about fifty days as follows:

15 days for drying;

10 days for arranging the kiln and

25 days for firing.

An average kiln will be able to fire 25,000 bricks of the size of that used on the stupa. This would indicate that about twenty kilns for firing the bricks are necessary.

If again only one team be working roughly the work would be completed within three years.

The fire wood necessary for the bricks would work out at about 80,000 maunds of fire wood which could be obtained from about 500 trees or any other material.

The cementing clay worked out at the present rate of 25 cubic feet of clay for 100 cubic feet of construction will be 35,000 cubic feet of clay obtainable from the vicinity.

If the team strength of masons be calculated it works out at 6,000 mason days with the assistance of 18,000 workmen days. If ten teams of 1 mason and 30 labourers each be employed to carry out the work it would take about 600 days or about two years for constructing the stupa after gathering the materials.

---

[1] I am most grateful to Shri Raojibhai Parsottamdas Patel and Narsimhabhai Zaverbhai Patel, building contractors, brick manufacturers for their help in calculating the work load and time factors.

One does not know the strength of the man power available to the builders of the stupa. But taking about five teams of brick manufacturers they could complete their job within a maximum period of about 16 months or two years and ten teams of masons and labourers be employed the work would be completed in another two years time. Taking all these factors into consideration the technical part of this work could be completed within about five years. This time is enough for moulding 26 images of Buddha and the other decorated bricks, for which moulds and modelling were used.

It is not possible to find out the cost of building this as we have no details about the then prevailing rates or any other economic ratios, but it would be interesting to know it and further work in this direction is necessary. At present such a work could cost more than 20,000 rupees.

It may incidentally be noted that the vihara was constructed at different times so an effort is not made to calculate the materials and man-power that might have been used. The extremely dilapidated conditions and want of certain data was another lacuna which did not make it feasible to work it out.

CHAPTER V

ANTIQUITIES

Pottery of Devnimori

During the course of excavations the following pottery types were found:

(1) Plain red ware (This consists of bowls, pots—plain and spouted, globular, large jars).
(2) Painted Red Ware (i) Black on red, (ii) Polychrome.
(3) Stamped (a) Plain, (b) Painted.
(4) Burnished black ware (Handi, Kunda, Storage jars).
(5) Mica-dusted (Handi).
(6) Crude—Red—and—Black Ware
(7) Red Polished Ware.
(8) Black arretine type.
(9) Amphorae.

Out of these nine types the first six seem to be the indigenous types. Seventh and Eighth are possibly developed after the Roman types, whereas the last is an import from the West.

The pottery here was mainly utilitarian. The plain red ware was the most common type, the burnished black and mica-dusted were less common. The other varieties were comparatively rare, on this site.

The details of these Wares are as follows:

Plain Red Ware

Plain red ware is the most common type of pottery that is recovered from Devnimori. This ware does not show any sign of burnishing. It is wheel-turned pottery. Some of them show weathering by which the ware becomes rather dusty and shows ochre-like colour, but the unweathered variety show that the pottery is well fired, with rather compact red core of levigated clay. It continued throughout the period of occupation. Being most common, this seems to be the local ware in this part of the country. Bowls, globular small pots, larger pots and jars are the chief shapes that are noted.

Bowls (Kodiyan)

These are fairly numerous on this site. They occur in a variety of sizes. ($\frac{7}{8}''$ to about 3″ high). They have a narrow base showing the string marks and the side of the base occasionally show the finger impressions of the pottery. The body shows the grooves developed by potters' fingers. The rims also show many varieties such as straight, slightly rounded, slightly incurved and so on. These were utilitarian wares known as Kodiyu, Bateru etc. in Gujarati. They are used today as lids, lamps, or for serving liquid and semi-liquid dishes in dinners. They occur in the early historic layers at Baroda, Vadnagar and other sites and in Satavahana levels in Maharashtra. Their varieties are as follows:

1. A bowl with deep-thumb-impression at the base and grooves all over the body. Slightly rounded rim and marks of wet cloth used to finish it on the outside. The base shows the groove developed by the string while removing it from the wheel.

2. A variant of No. 1 but it shows the thumb and finger impression of the potter at the time of removing it from the wheel. This haste has slightly deformed it. This shows the signs of weathering.

3–6. These are medium sized bowls which are similar to the above noted types, but are almost half the size of the former.

7–11. These are much smaller. No. 11 is hand made. No. 10 is partly black. Nos. 7–8 show the marks of weathering.

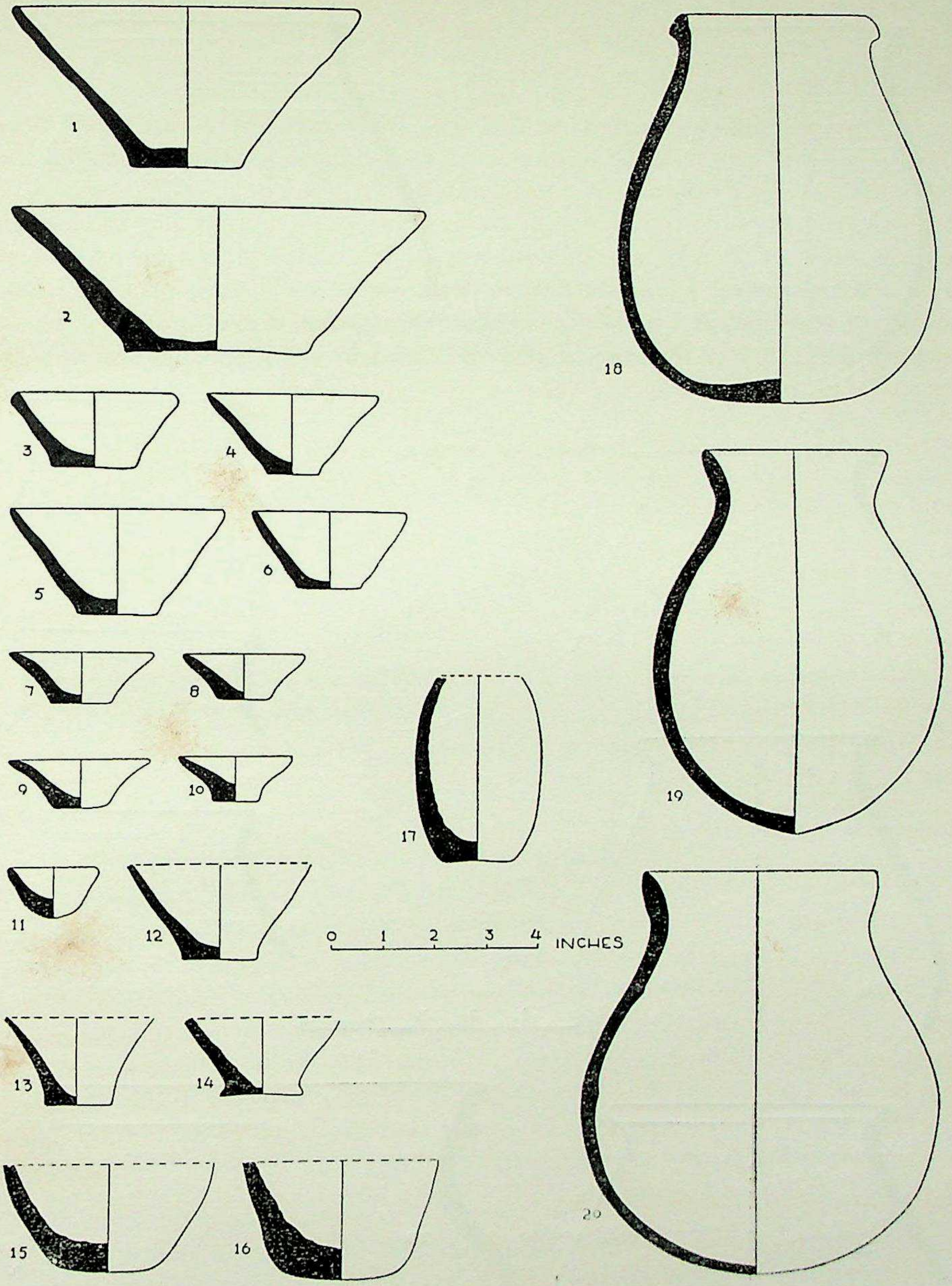
12–17. They form a rather up-right variety, but only their bases and parts of the sides are obtained. Their bases are either flat (Nos. 16-17) or similar to those of the former variety. One of them is red on the exterior but black interior. Its core is also partly red and partly black as a result of firing under conditions of reduction (Fig. 27).

Pear-shaped Pots (Ghadiyan)

These are in two main varieties. One of them has a sagger base, whereas the other has a comparatively flat base. These vessels were first thrown on the wheel and then enlarged by the use of a round stone known as " Pindlo " which was held inside the semi-dried pot, and flat wooden board known as Tapala. The marks made by these tools have erased the marks of potters fingers, that are distinctly seen on the upper part of these pots. The rims of these pots are slightly excurved and they are beaded to a smaller or greater degree. Some of them show fairly thick variety (Fig. 27 and 28).

18. This is a pear-shaped thick variety.

19-20. Pear-shaped pot with semi-pointed base.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
0 1 2 3 4 INCHES

Fig, 27

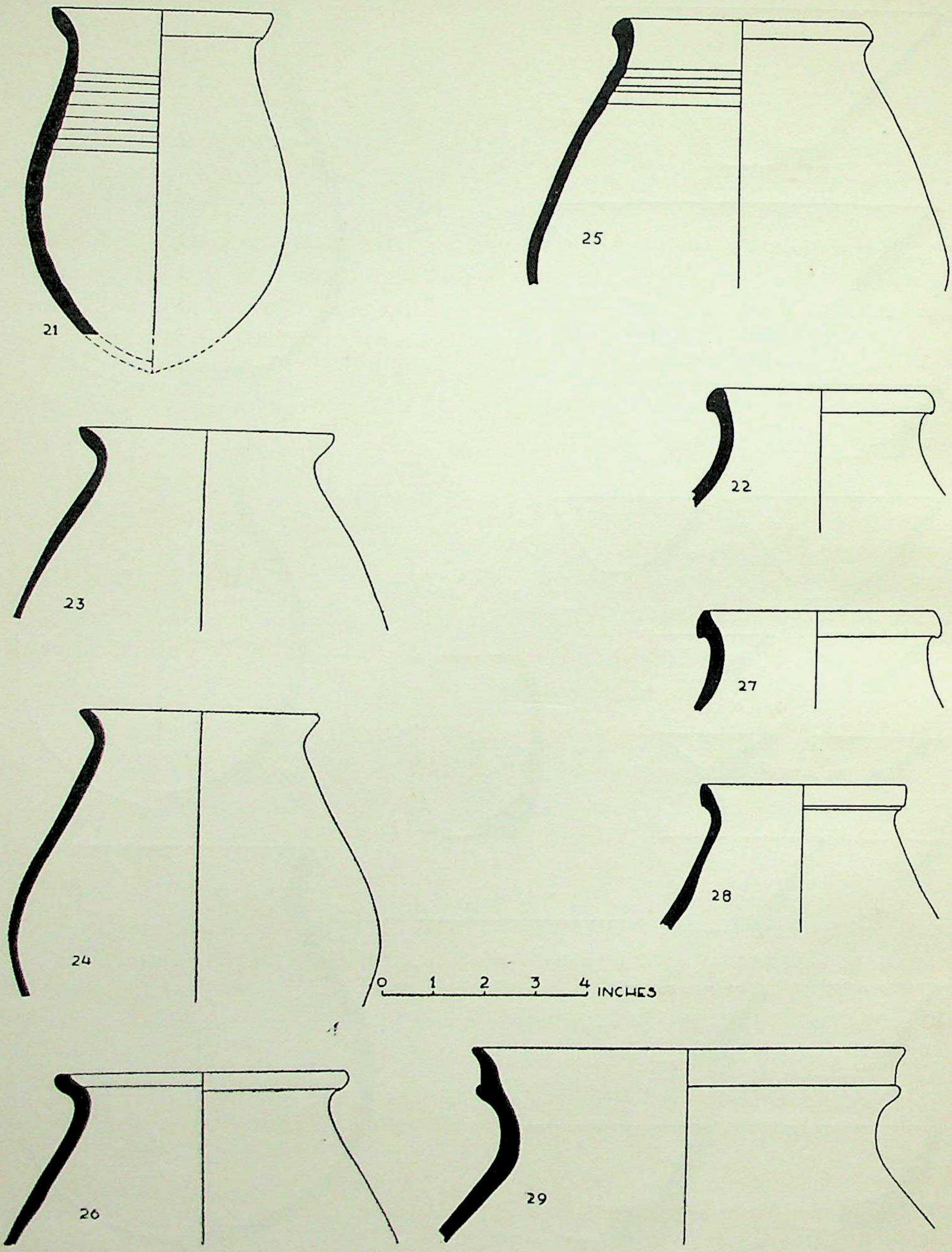

21
25
22
23
27
28
24
0 1 2 3 4 INCHES
26
29

Fig. 28

21. Pear-shaped pot with broken base.

22–28. The sherds showing the varieties of rims of the pear-shaped pots.

29. Upper part of a pot with a groove on the rather flared rim.

Pots (Ghada, Matala)

There are a number of sherds of pots, that are known as Ghada and Matala according to the size. They are the water pots or pitchers. As no complete pot is discovered, it is not possible to give any idea of the shape of the base, but their upper part suggests spherical shape. They are characterised by flared rims of the following varieties:

30. A flared rim with a small groove below the rim.

31. A variant of 30 with less flared rounded rim.

32. A variant of 30 with shallow groove inside and a small ridge on the shoulder.

33. A variant of 30 with plain neck.

34. A variant of 30 with plain neck and less flared rim.

35. A variant of 32 with shorter neck and rounded upper part. This shows the signs of weathering.

36. A variant of 32 with much shorter neck.

The pots showing beaked and beaded rims form a sub-type of the rim-formation. They show the following varieties:

37. A small pot with a rectangular section of a lightly flared rim.

38. A variant of 37 with a pronounced beak on the outer edge of the slightly oblique outer part of the rim.

39. A variant of 37. It has more pronounced groove on the rim.

40. A variant of 37 with more straight outer rim.

41. It has a deep groove on the inner side of the rim.

42. This pot sherd shows that it was a spouted vessel.

43. A variant of 40 with a shallow groove below the upper part of the rim.

44. A variant of 37 with a shallow broad groove.

45. A variant of 44 with a deeper groove.

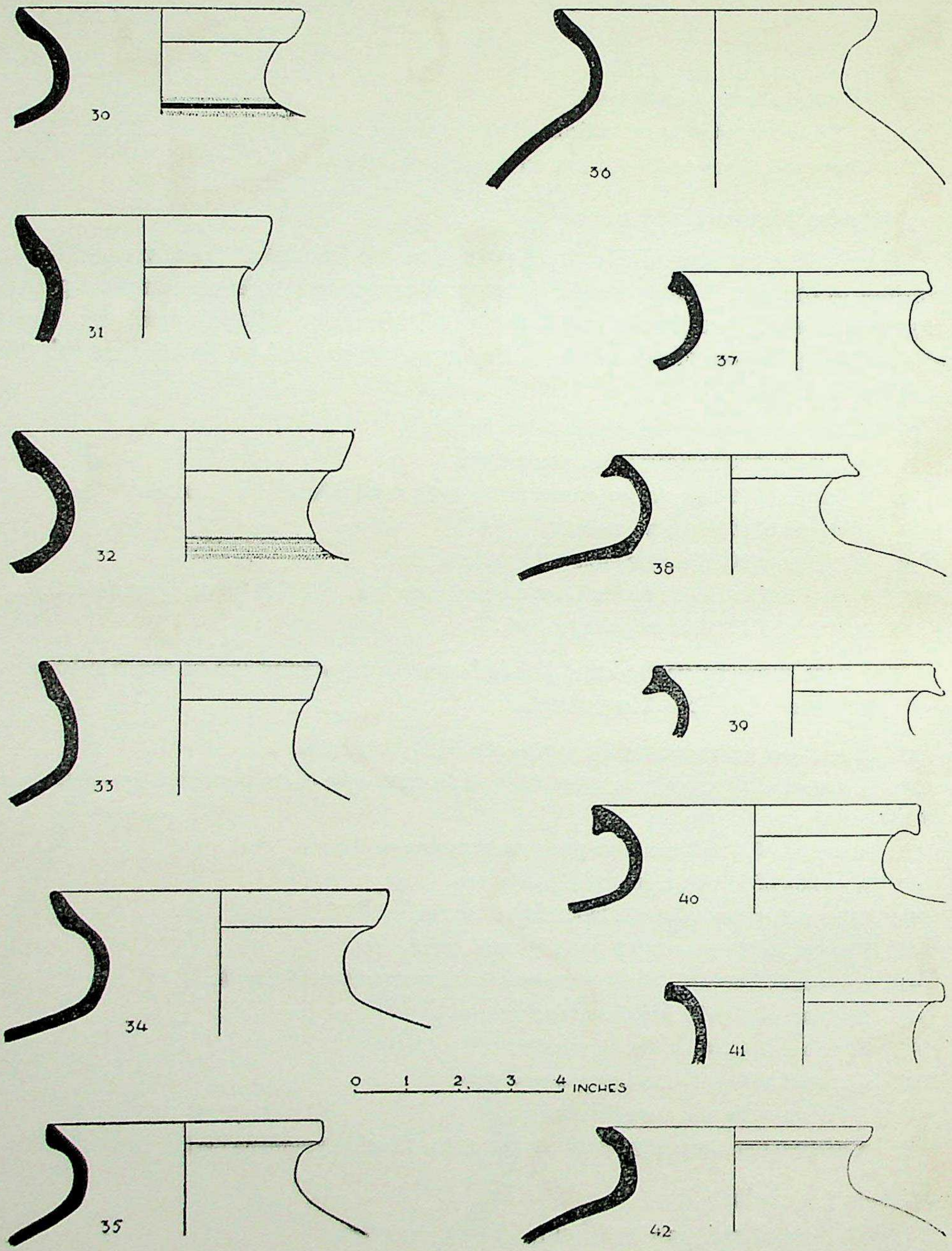
46. A variant of 44 with more pronounced groove.

47. A variant of 44 with a smaller rim.

48. A bevelled rim with a ledge at its base and a broad shallow groove on the inner side.

Small pots (Kuladio)

Small pots of red ware are found in two varieties:


30
36
31
37
32
38
33
39
40
34
41
0 1 2 3 4 INCHES
35
42

Fig· 29

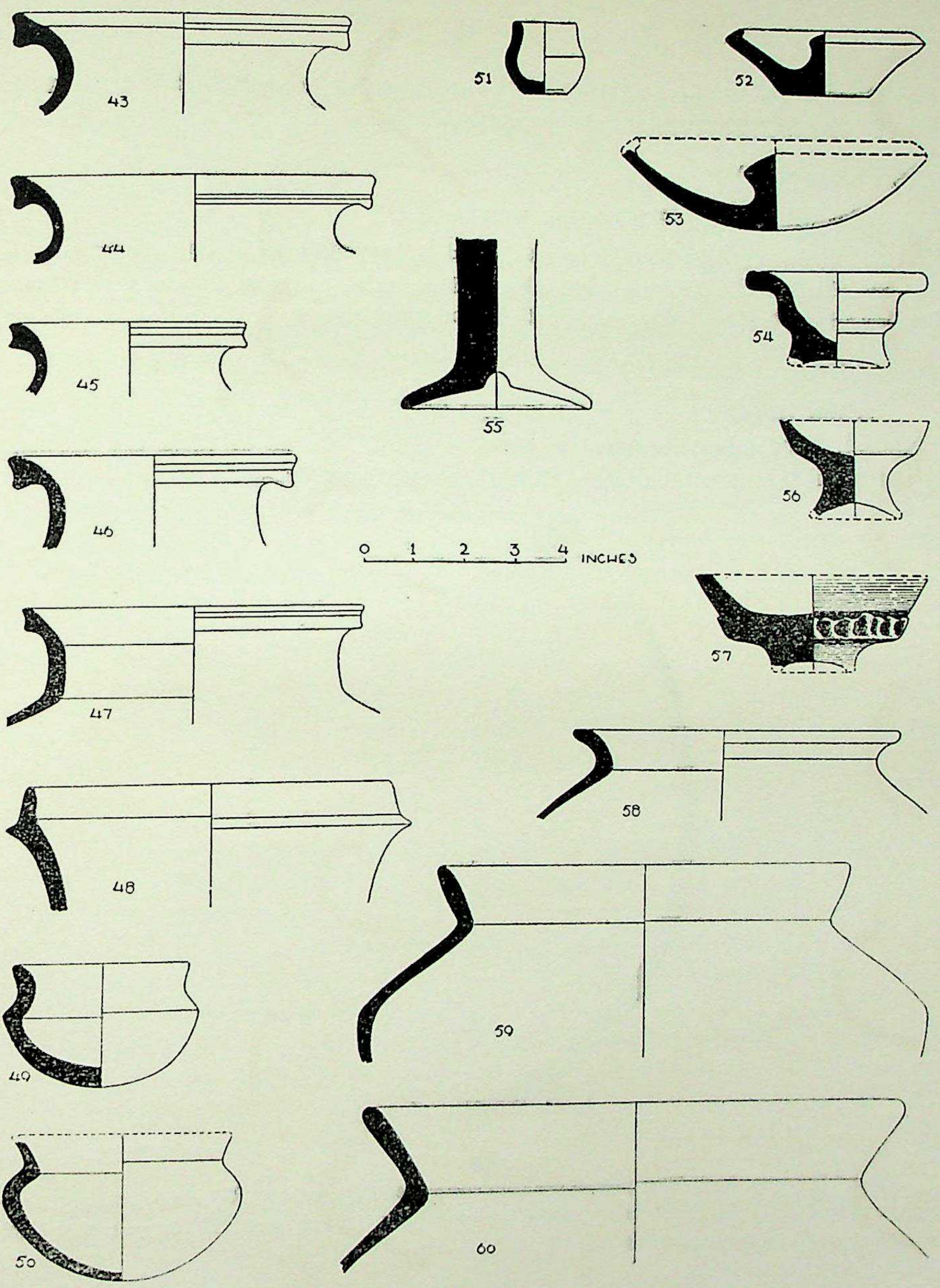

43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
0 1 2 3 4 INCHES

Fig. 30

49 and 50 are the pots with rounded rim constricted neck and globular body with saggar base whereas the other 51 has rudimentary flat rim and flat base.

Lids (Dhankana)

Lids with a knob in the centre were found.

52. This is a complete lid with incurved rim and flat base with a small knob in the centre.

53. The parts of lids have been found but as their rims are broken so that one cannot have the complete idea of the shape, but they show both flat and sagger base.

Incense burners (Dhupiyan)

A few fragments of incense burners which look like 'dish on stand' were obtained. The tallest fragment is about 4″ high. As all of them are broken it is not possible to give the details of the shapes of these types.

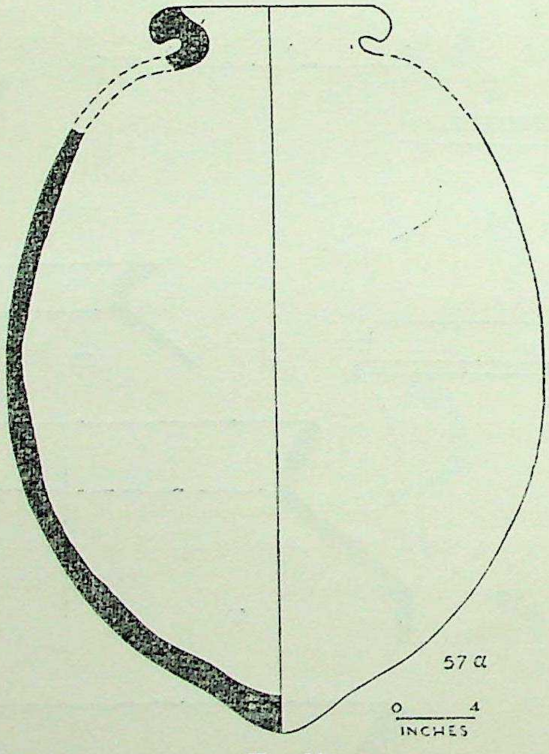


Fig. 31

But (54) some look like squat stands with corrugated base, others (55) have a straight stem on disc-base, and (56) the third variety shows a narrow neck. A fragment (57) suggests that exterior was decorated by applique designs.

Large storage jars (Kothi)

57a. Large storage jars with slightly flared rim and short neck were also obtained (Fig. 31).

Amphorae sherds (Surapatra)

In the excavation only three indescribable sherds of amphorae were obtained. This well-levigated light cream coloured ware is the well-known Roman import in India. The black incrustation was examined chemically. " It represents resinous substance formed as a result of sedimentation from the liquid that stood in the pot. This resinous material is an organic alphatic compound which burns with a sooty flame, is soluble in benzene, tolune but insoluble in ractified spirit and ether and under microscope it shows resinous lustre."[1]

This analysis suggests that these resins are probably the sedimentation of wine that was imported in large quantities in such amphorae. Such costly luxury was available to the Buddhist monks at Devnimori is worth noting. Unfortunately the sample obtained is too small for further work on this interesting problem.

Micaceous Pottery

It is also red ware, which shows that the clay used for its manufacture was micaceous. It was probably a rather costlier and less used ware. Most of the shapes in it has larger mouths. The following varieties in this ware are noted:

58. A small sized handi with flared rim.
59. It is a broad mouthed pot (Handi) with flared rounded rim, short neck and globular body with a carination on the upper part of the belly.
60. It is a much larger vessel.
61. A variant of the above with a shallow groove on the shoulder (Fig. 32).
62. This is also a broad mouthed pot with a flared bevelled rim and a ledge at the shoulder.
63. A variant of 62 with more rounded, flared rim.
64. A variant of 62 with less prominent ledge and a shallow groove on the rim.
65. A thin variant of 64.
66. A broad mouthed bowl (*kundu*) with incurved rim and a small groove near the outer rim.
67. A deep bowl (*kundu*) with straight rim.

---

[1] The chemical analysis of the material was carried out by Shri K. T. M. Hegde in our departmental laboratory.

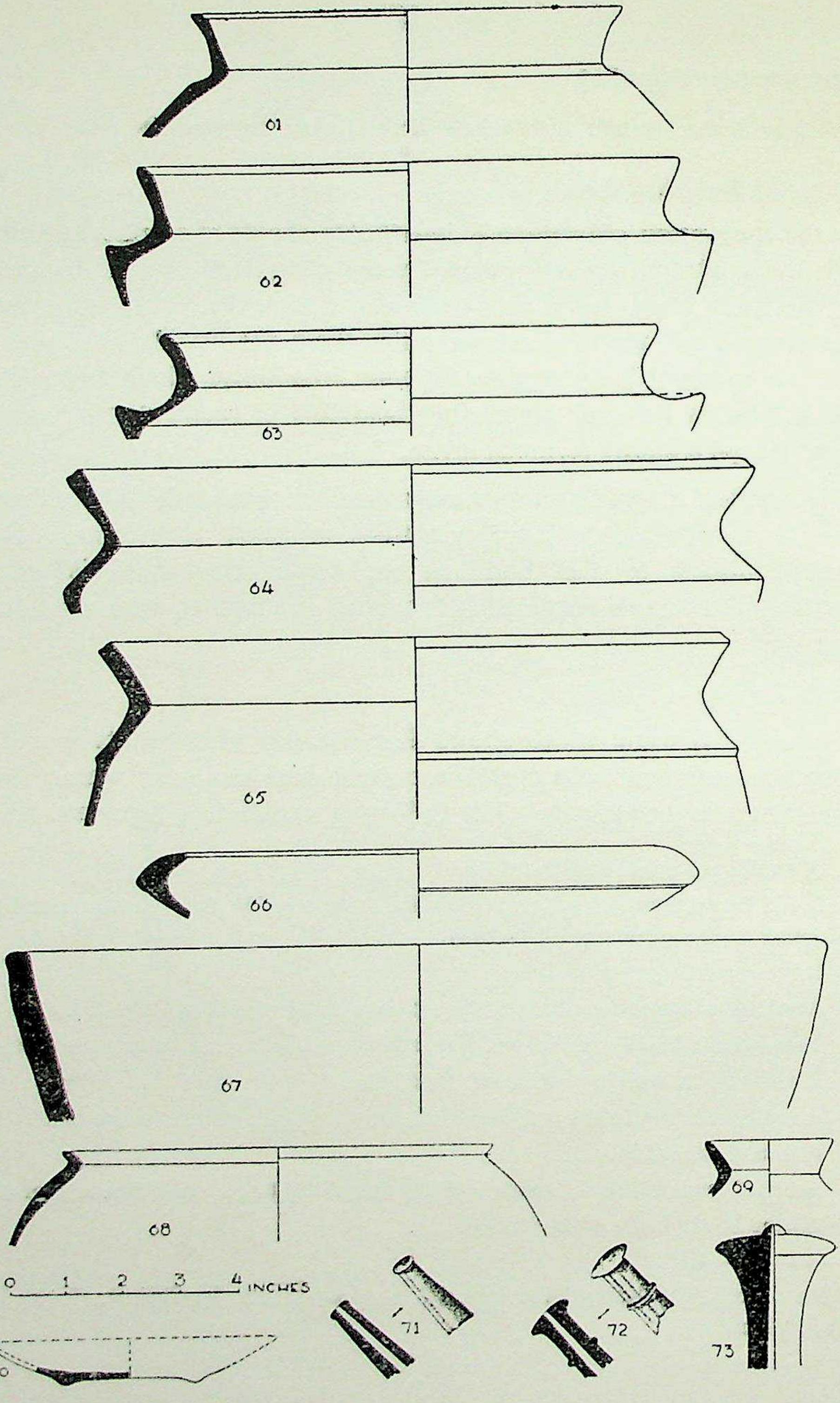

61
62
63
64
65
66
67
68
69
0 1 2 3 4 INCHES
70
71
72
73

Fig. 32

Decorated ware

The decorated pottery from Devnimori is of two main varieties: (i) the Painted and (ii) the Stamped-and-incised ware. This is similar to the Plain-Red-Ware so far as its manufacture is concerned. The decoration is seen on the upper part and the middle part of the body. This ware is also known from other centres like Kolhapur[1], Maheshwar[2], Sisupalgarh[3] and Tripuri.[4]

Stamped and incised Ware

The stamped and incised ware show the decoration on the middle part of the body. The following designs were noted (Fig. 33 and Pl. XX):

74. Oblique incisions, that form one band.
75. Two bands of oblique incisions.
76. Oblique incisions with small parallel lines seen on the oblique incision.
77. Herring bone pattern of 76 type.
78. Thin vertical designs similar to No. 76.
79. A variant of 78 with one deep and one shallow depression.
80. A design similar to 78 but with incised lots making the vertical lines.
81. Obliquely laid pattern No. 80 with added finger-tipped design on one side of it.
82. Incised arcs or finger nails in horizontal order with vertical and oblique lines.
83. Oblique small finger tip designs, four finger tips are in each unit. The design gives an impression of hill like motif on Kshatrapa coins (Fig. 34, Pl. XX)
84. The finger tipped designs in five horizontal units.
85. Small embossed dots.
86. Embossed dots in oblique rows.
87. A variant with single large dot with alternative vertical line.
88. Embossed dots in vertical raw alternated by a vertical line.
89. A variant of 88 with six armed swastik like symbol between the design.
90. A floral design.
91. Two horizontal bands of embossed dots between which a floral like design is embossed.
92. Embossed floral design with central boss and ten petals.

---

[1] SANKALIA & DIKSHIT, *Excavations at Brahmapuri (Kolhapur)*, 1945-46, p. 58, fig. 14.

[2] SANKALIA, DEO & SUBBARAO, *Excavations at Maheshwar and Navdatoli*, p. 170 ff. Pl. XVIII.

[3] LAL, B. B., Sisupalgarh, *Ancient India* No. 5, p. 87.

[4] DIKSHIT, M. G., *Tripuri*—1952, p. 41 and Pl. XXIX.

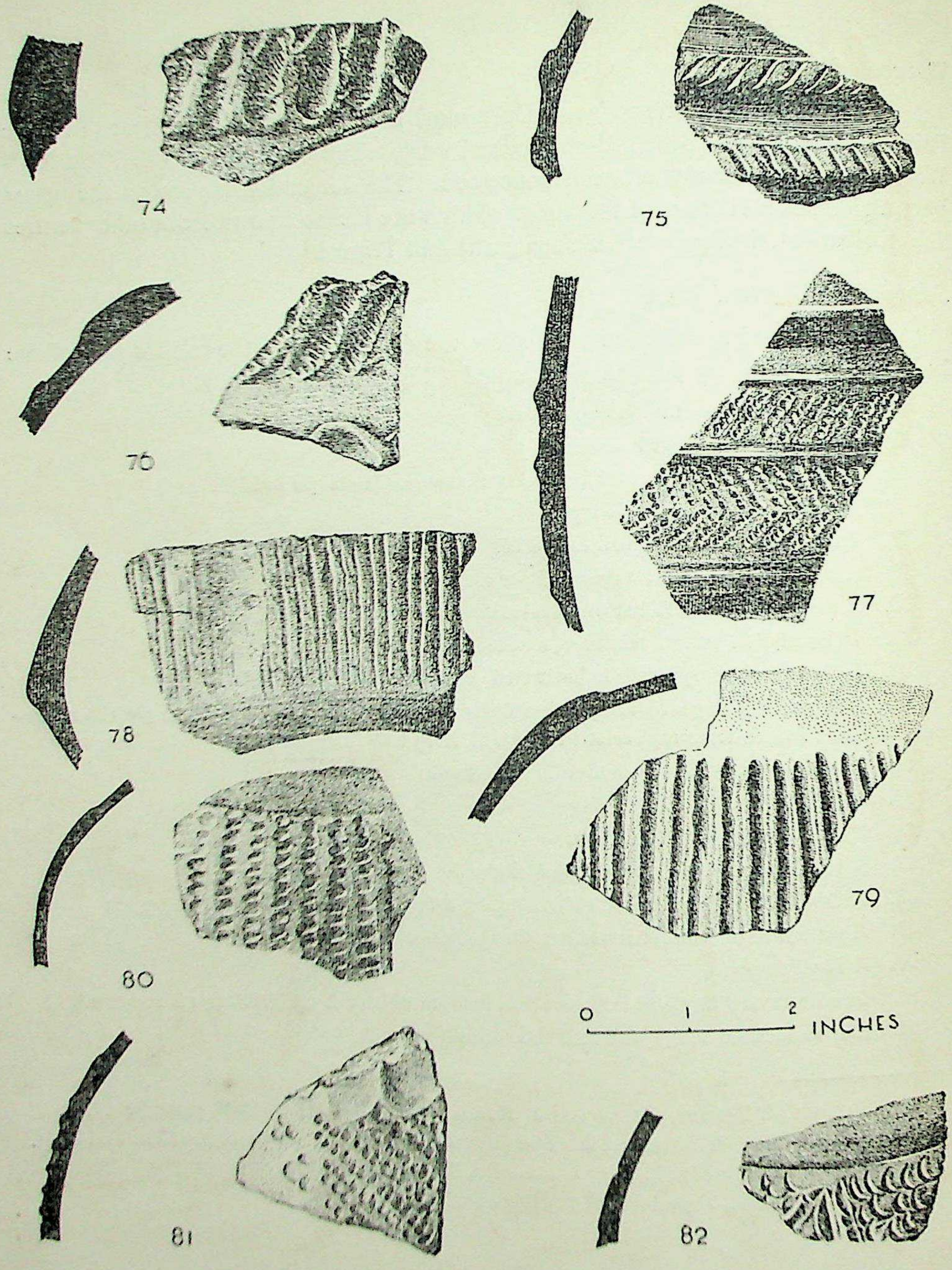

74
75
76
77
78
79
80
0 1 2 INCHES
81
82

Fig. 33

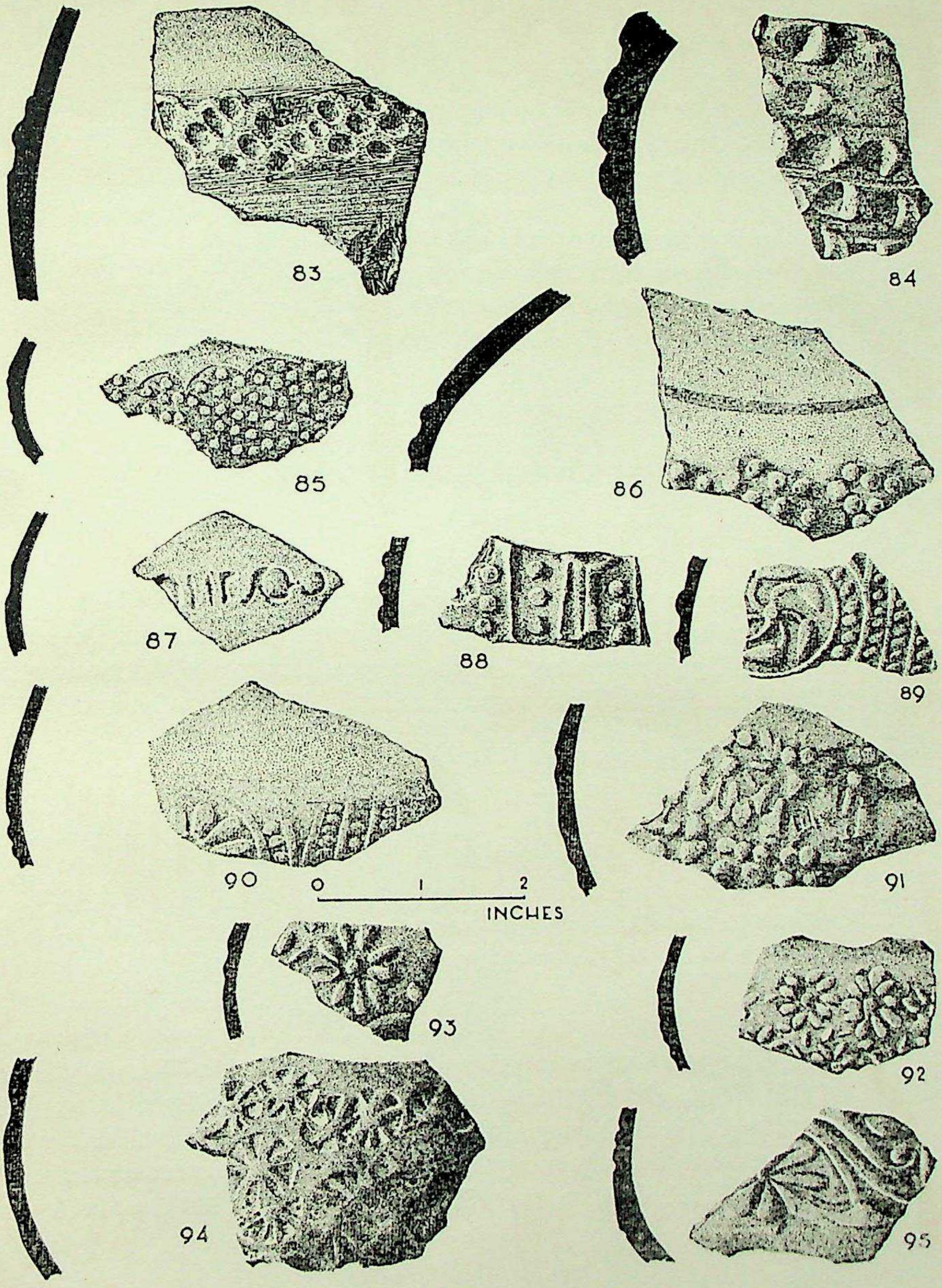
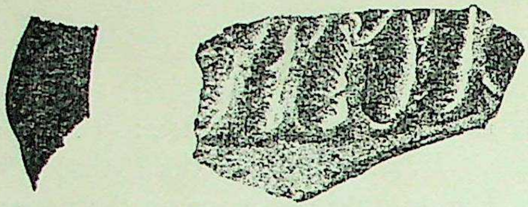
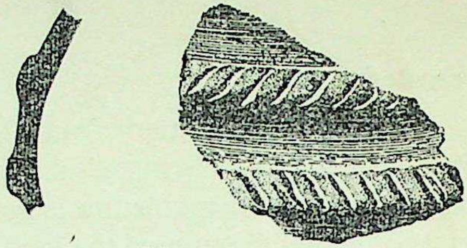

83
84
85
86
87
88
89
90
0 1 2
INCHES
91
93
92
94
95

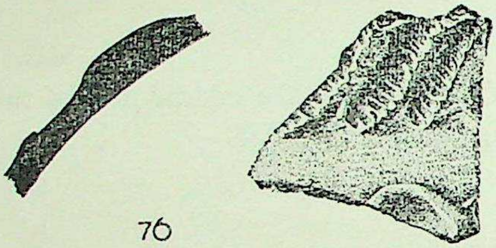
Fig. 34



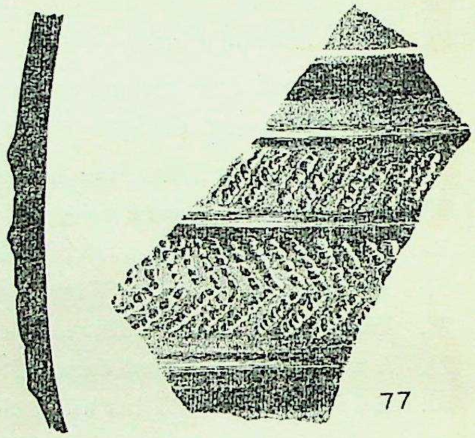
74



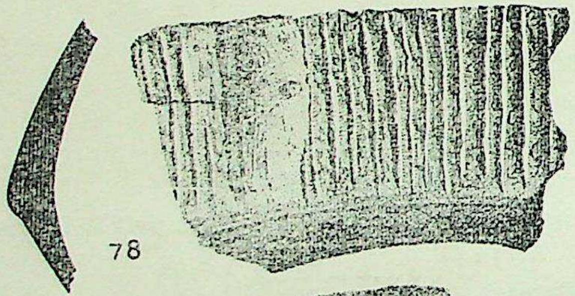
75



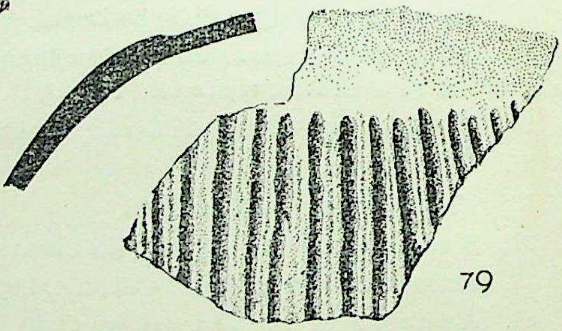
76



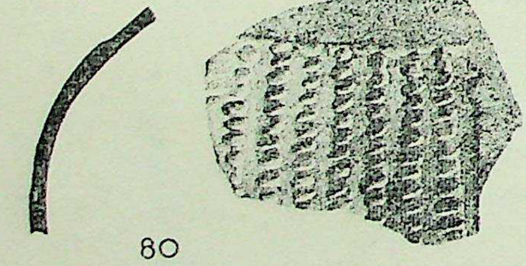
77



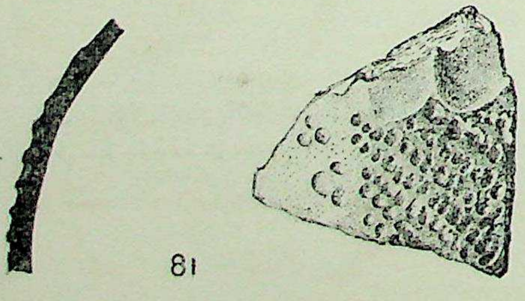
78



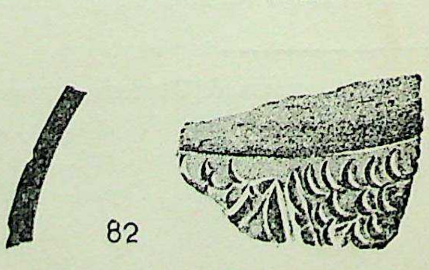
79



80



81



82

Fig. 33

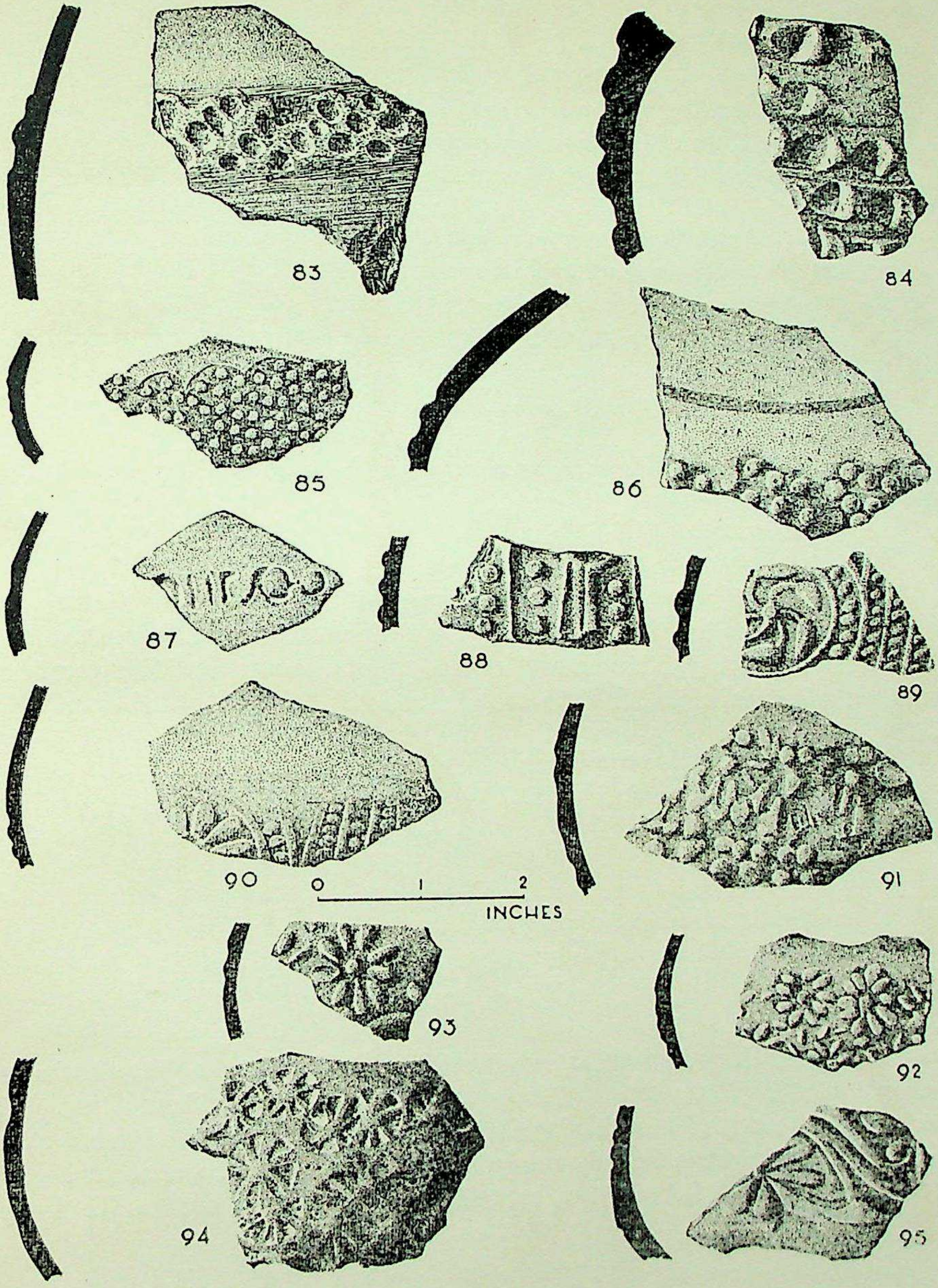

83
84
85
86
87
88
89
90
0
1
2
INCHES
91
93
92
94
95

Fig. 34

93. Flowers with nine petals.

94. Overlapping flowers with six petals.

95. Part of floral creeper with flower having more than six rhomboid petals and lines of a creeper.

96. A variant of 95 but its embossing is not very clear (Fig. 35, Pl. XXII).

97. Floral design with flowers marked by raised borders of the petals having depression in the centre.

98. A floral creeper with stylised petals on both sides of a thick line.

99. Half embossed flowers in two horizontal rows.

100. Flower within a band of two plain lines enclosing dots.

101. This is a variant of type 100 with two plain lines and flowers of different pattern.

102. Dots within loops.

103. An arabasque like creeper with embossed flowers below it. This has alternating black and white bands.

103a. A stamped mica dusted pot sherd with stamped flowers, leaves and a line of raised dots below this design.

Red polished ware

This is now a very well-known pottery occurring on the early historic sites in many parts of India. Small sherds of this Ware were obtained from Devnimori. They occur in varying thickness and are too fragmentary to need any comments. However, a few shapes in this Ware were discernible. They are as follows:

68. An upper part of a globular pot with slightly excurved small rim.

69. A pot with flared featureless rim.

70. Ring base of a dish (?)

Spouts (*Nalacha*)

71. A cylindrical spout with a groove near its neck.

72. A spout with flat rounded head and a ledge on its lower half.

Kaolin like Ware

Neck of a long-necked jar in yellowish white Kaolin-like Ware is the only example of this Ware, showing finely levigated clay and uniform firing. This neck with flat rounded head having a nipple in the centre through which a narrow hole is passing below is the only example in this ware. It is a common shape, that is seen in the Red Polished Ware, as well as plain red ware; but the fine finish of

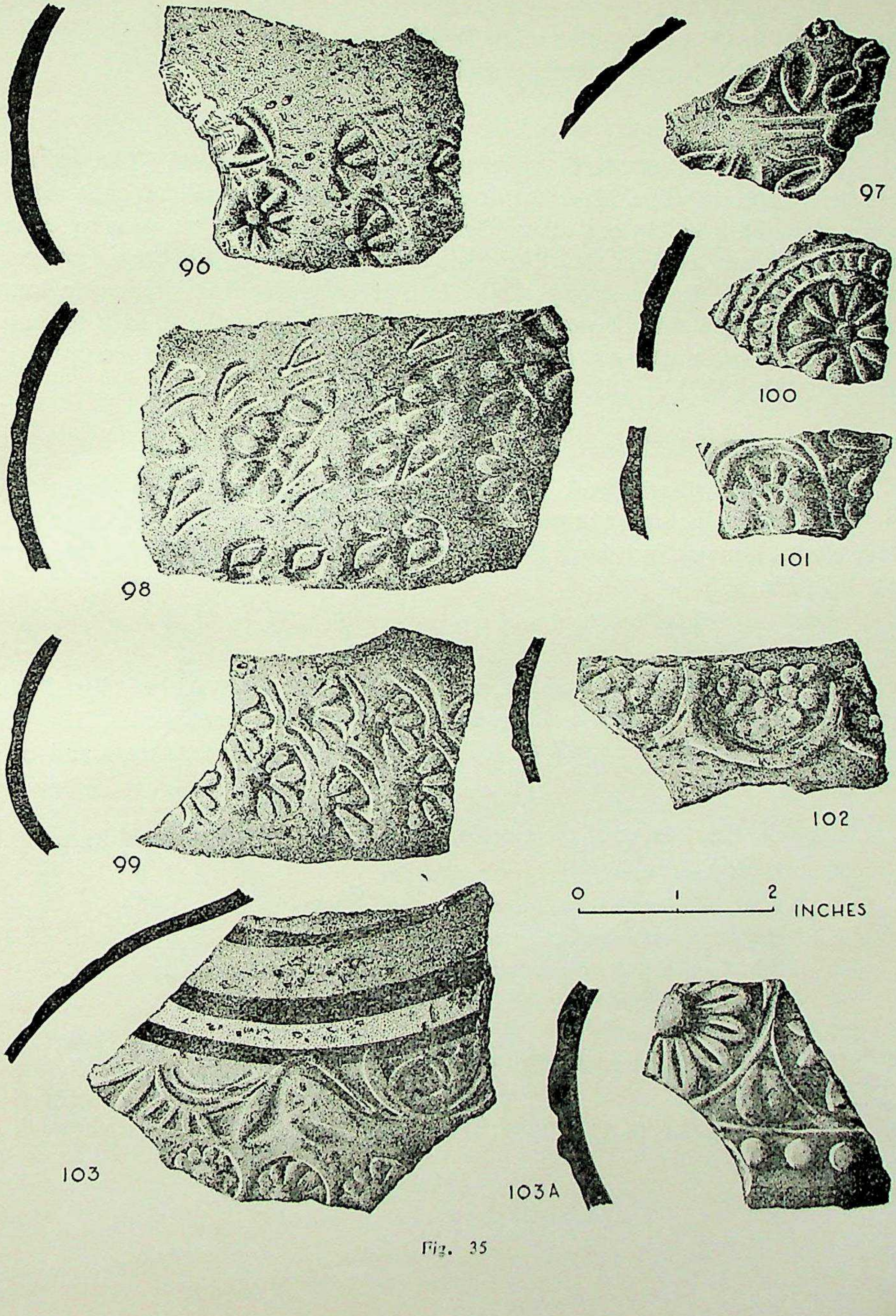

96
97
100
98
101
99
102
0
1
2
INCHES
103
103A

Fig. 35

this sherd is much nearer to that of the Red Polished Ware. This shape is identified by Dr. M. G. Dikshit as "Dharma Karaka".[1]

Painted Pottery

A few painted potsherds were obtained from Devnimori. The painting consists of bands of white, black colour on the background of red which is similar to the plain red ware but one cream sherd has red bands, and the painting occurs on the upper part of the pots. No other discernible design has been discovered from Devnimori. It has strong affinity to that occurring from Vadnagar, but it does not show the richer repertorie of Vadnagar. Incidentally it may be noted that some stamped wares were also painted. The painted designs are illustrated on Nos. 121, 122, 123, 124, 125, 126 (Fig. 37).

Crude Red and Black Ware

The Crude-Red-and-Black Ware is also a well-known Ware in central and southern Gujarat in early historic period. From Devnimori the only sherds are those of globular pot with large flared rim and short neck (*Handi*), in two sizes. 104, 105 (Fig. 36).

Mouths and Spouts

The remains of long necked jars and those with spouts could be inferred from the mouths, as well as spouts that were found from the excavations. They are found in plain red ware as well as red polished ware, micaceous ware and even black ware.

The following shapes of the mouths of the long necked jars could be noticed:

107. A funnel shaped mouth with flared bevelled rim.
108. A variant of 107 with broader mouth and a groove below the neck.
109. A straight rimmed mouth with a ledge below the rim.
110. A mouth with slightly oblique outer part of the rim and constricted neck.
111. A dish-like mouth with a nipple in the centre.
112. A variant of 111.
113. A mouth with large nipple with a groove below it.

---

[1] Dikshit, *op. cit.* p. 79.

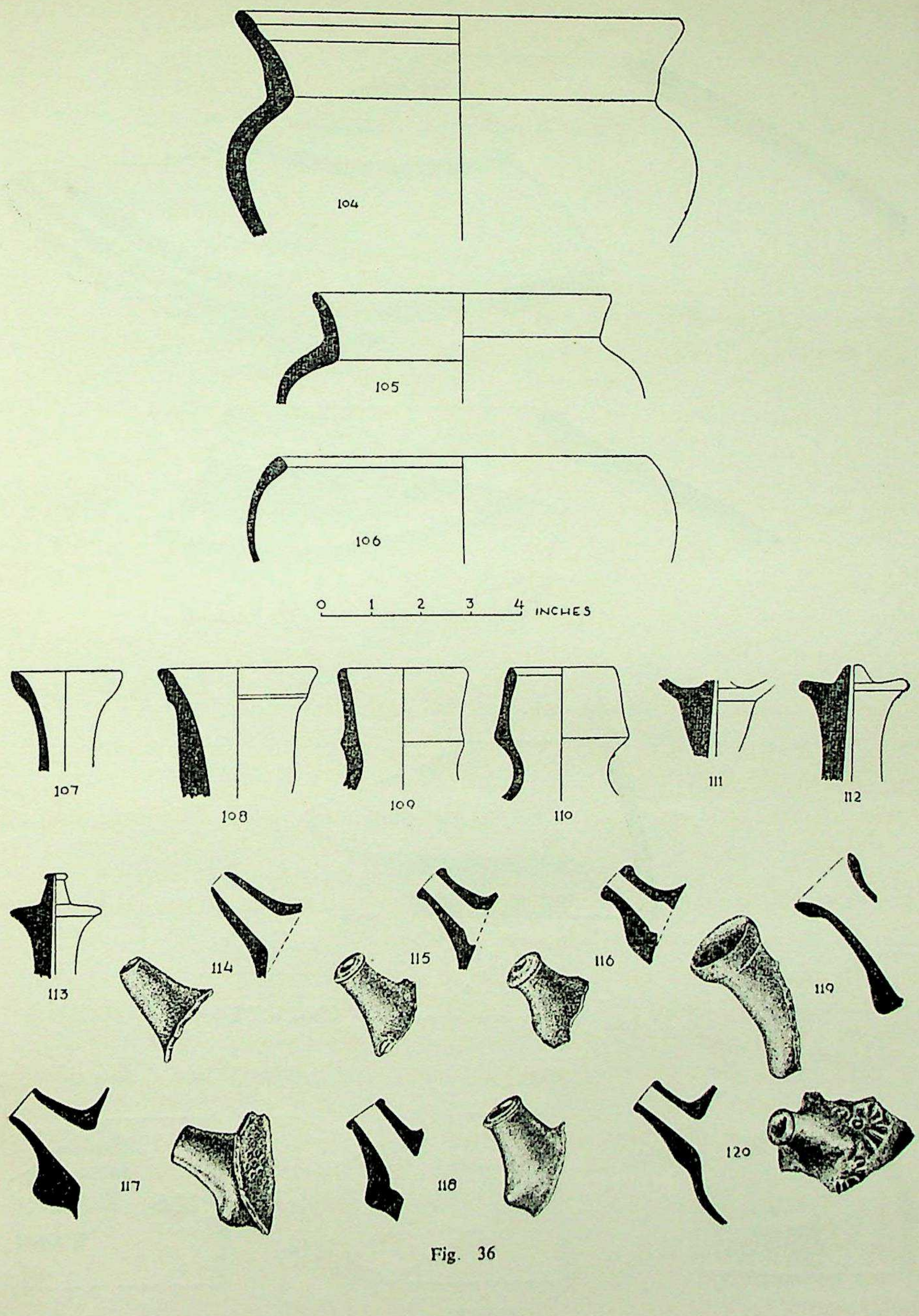

0 1 2 3 4 INCHES

Fig. 36

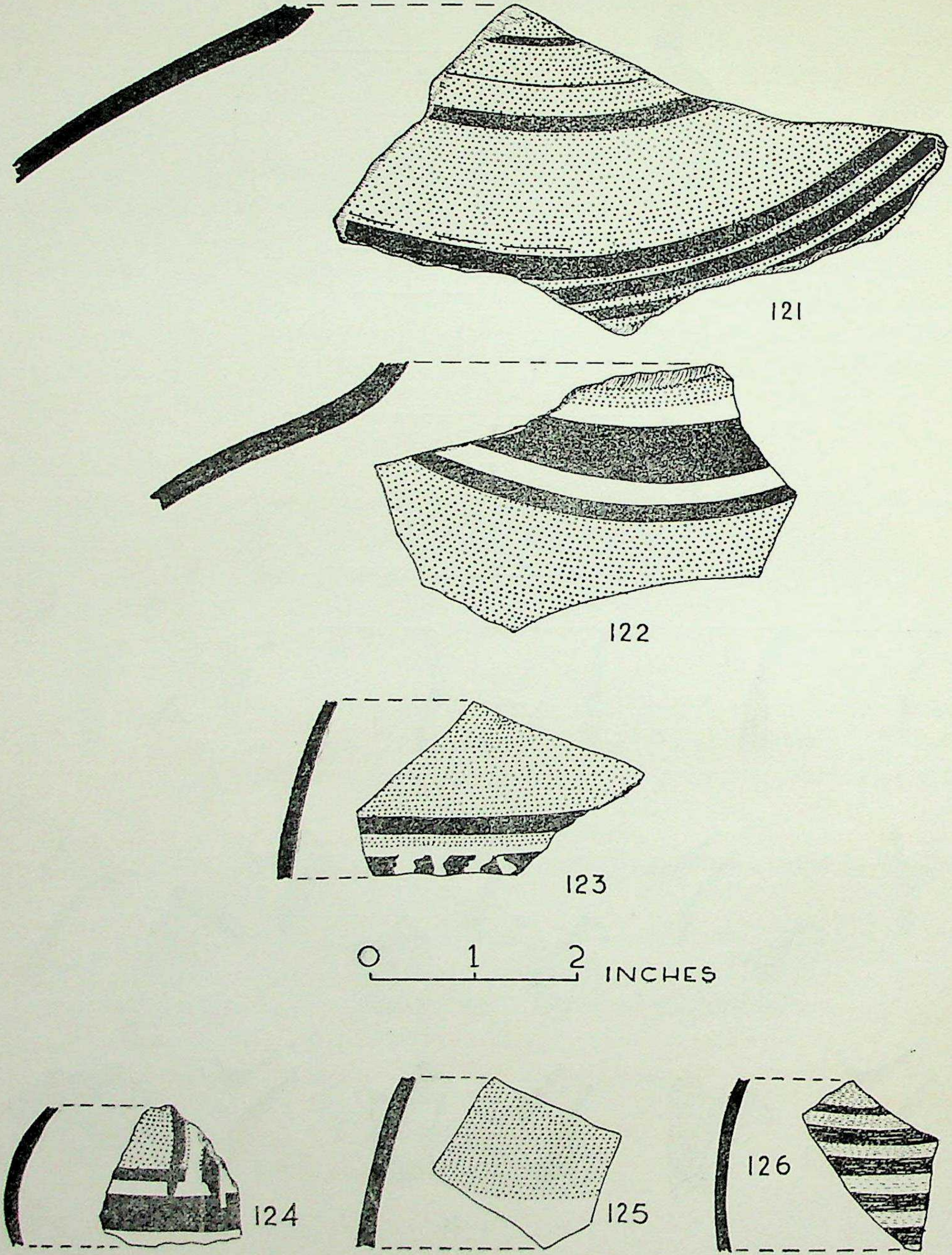

121
122
123
0 1 2 INCHES
124
125
126

Fig. 37

Spouts

Many varieties of spouts are also obtained in this excavation. They are as follows:

114. A cylindrical spout.

115. A spout with beaded mouth.

116. A spout with a knob at its base.

117. Variant of 116. It has perforated base. This was done probably by first perforating the pot and then applying the spout.

118. Another variant of 117.

119. Funnel shaped spout.

120. A spout with a ring mouth and stamped body of the vessel.

Black Ware

106. A bowl with well levigated clay and even firing and having incurved rim and convex belly is the only specimen of this ware.

Stone Objects

The stone objects consist of potters' supporting *Pindalo* (Dabber) mullers, hammer-stones, fragments of images of Buddha, dishes, slates, discs etc. The stones used for manufacturing these objects are schist, quartzites, granites and sandstones. The details of these objects are as follows:

Mullers (Nishatara) (Fig. 38 and Pl. XXIII A)

Six mullers were obtained during the excavations. They are oblong pieces with circular and oval sections. Some of them show distinct marks of rubbing.

1. A muller of schist (4.3/4" long). Its surface is polished due to use (No. 84) spherical section (Stupa) (Fig. 38,1)

2. A sandstone muller showing some depressions and smooth surface developed due to use. Its one end is of larger diameter than the other, and has spherical section (Vihara II). (Fig. 38,2).

3. A broken sandstone muller with oval section (Fig. 38,3).

4. A small broken muller of sandstone. One of its end is spherical, and is larger than the body (V.E. 7) (Fig. 38,4).

5. A fragment of a sandstone muller with circular section (B. 7) (Fig. 38,5).

6. A highly fragmentary muller of sandstone. It has circular section (I.3) (Fig. 38,6).

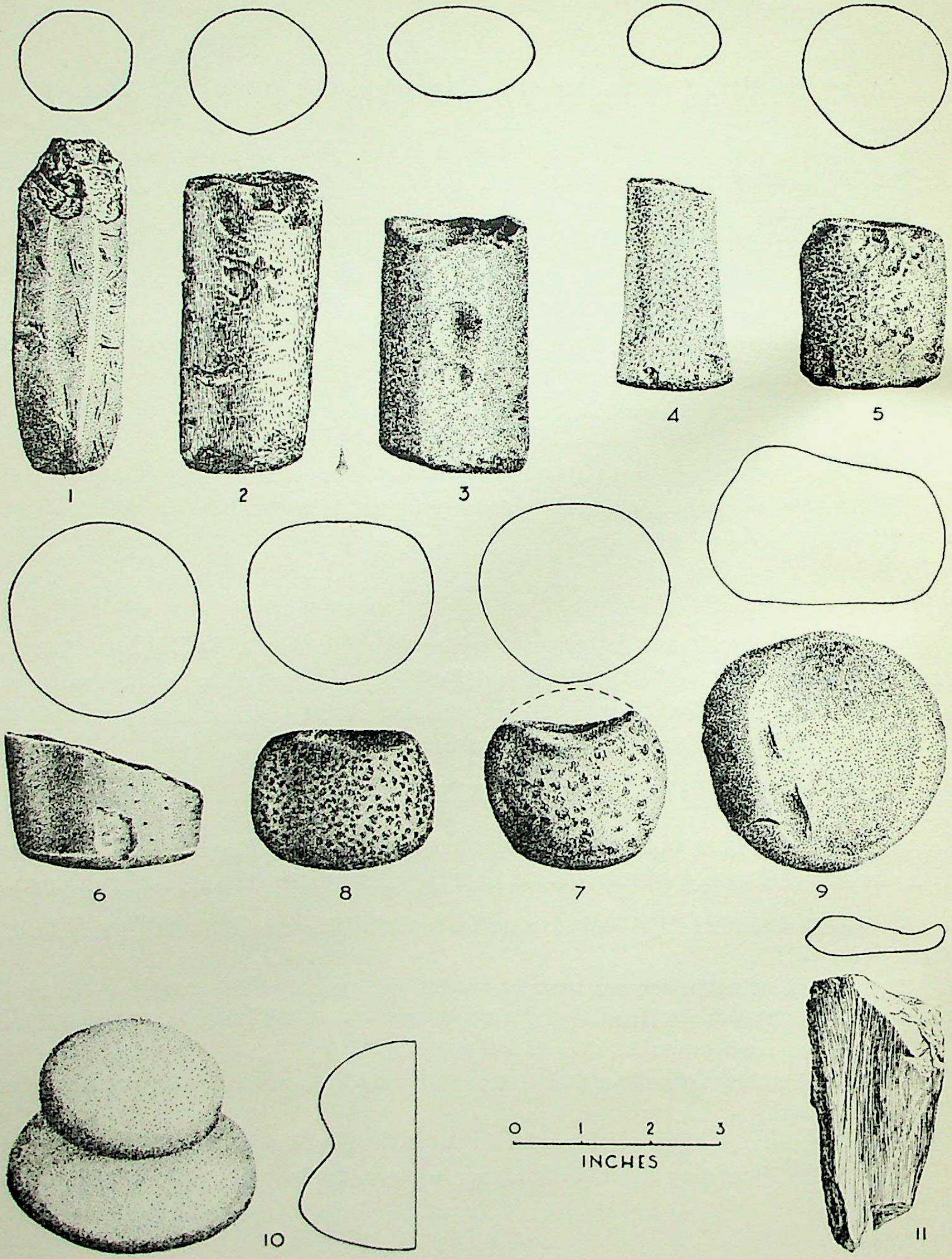

1
2
3
4
5
6
8
7
9
10
0 1 2 3
INCHES
11

Fig. 38

Hammerstones (Ashma Ghana)

Only three spherical hammerstones of quartzite have been discovered.

1. A quartzite hammerstone with a depression in one side. A vain is clearly seen on it (Vihara C. 6) (Fig. 38,7 & Pl. XXIII B).

2. A hammerstone of quartzite with marks of battering on one side. (Vihara, A. 7) (Fig. 38,8).

3. A spherical hammerstone with battering on one side. (Vihara, B. 4) (Fig. 38,9).

A Die

A die for smith is also obtained. It is partly broken and too highly worn out to need further comment.

Small stone balls

Nine spherical stone balls not larger than ½″ diameter were obtained from a pit. These are possibly pieces of games, or counting devices (?).

Potters' Dabber

A dabber of potter (Pindlo) of granite was obtained from the Vihara I (A. 7). It is a circular object with constricted middle part. (Fig. 38, 10 and Pl. XXIII C).

Buddha Image

Four fragments of schist were obtained. These are the fragment of images of Buddha.

1. Fragmentary torso with right shoulder, and parts of chest, belly and left arm. It shows the drapery of the *Uttariya* on both shoulders. It is executed by incised lines (Stupa surface) Pl. XXIII D.

2—3. Fragments showing the rings of the curly hair.

4. Part of the left shoulder of an image with drapery formed by deep incisions making the surface corrugated, A. 2 (Pl. XXIII E).

5. An irregularly broken piece of schist showing the marks of foot-print of Buddha (?).

Schist Dishes

1. A fine schist dish with a narrow base and fine polish over the whole body. It has a small knob and two concentric lines in the centre. It has been turned on a lathe.

2-3. Fragments of a dish similar to No. 1. As their central part is missing it is not certain whether they are the fragments of a dish with base.

No. 2 has five concentric lines whereas No. 3 has two lines. (N. W. corner, Vihara I).

Lower support of door (?)

1. A large (11″) fragment of a rectangular slab of schist shows concentric grooves which seems to have been developed by the rotating lower axis of a door (Pl. XXIII F).

Miscellaneous objects

1. A small semi-rectangular fragment of a schist with scratches showing Brahmi script. It seems to be a student's slate for practice. (Vihara D. 1).
2. A knob with three circular tiers. This piece is turned on lathe (Stupa).
3. A squat knob without any tier. It is also turned on lathe.
4. A circular flat disc.
5. A sharpener of semi-triangular flat piece of schist. One of its side is used for sharpening some tool. (Vihara C. 7) (Fig. 38,11 and Pl. XXIV A).
6. A fragment of a mace-head (?) from surface.
7. A river boulder with an artificial depression in the centre. It might be used as a support for door (?) It is also from surface. It might suggest the first steps for boring a hole.
8. A humped bull of steatite (Fig. 40,6).

Rotary Quern (Ghanti)

Upper and lower parts of a rotary quern with horizontal perforation for handle were obtained from Mahavihara (Pl. XXIV C, D). It is partly broken.[1]

Terra-cotta objects (Fig. 39)

The terracotta objects consist of beads, Votive tanks, animal figurines, discs, flesh rubbers, etc.

Votive Tanks

Two fragments of rectangular votive tanks were obtained from Vihara I. One of them is of red and the other of light cream colour. These are too fragmentary to comment on. One of them is illustrated in Fig. 39.9.

Votive Stupa

1. A negative broken terracotta dye for votive stupas was obtained from the vihara (Fig. 39,10 & Pl. XXV G).

2-3. Two red solid globular hand-made objects with broken top, showing a small hole on the broken part and flat base may be tentatively identified as votive stupas. (Fig. 39,7).

---

[1] H. D. Sankalia, *From History to Prehistory at Nevasa p. 477 ff.*

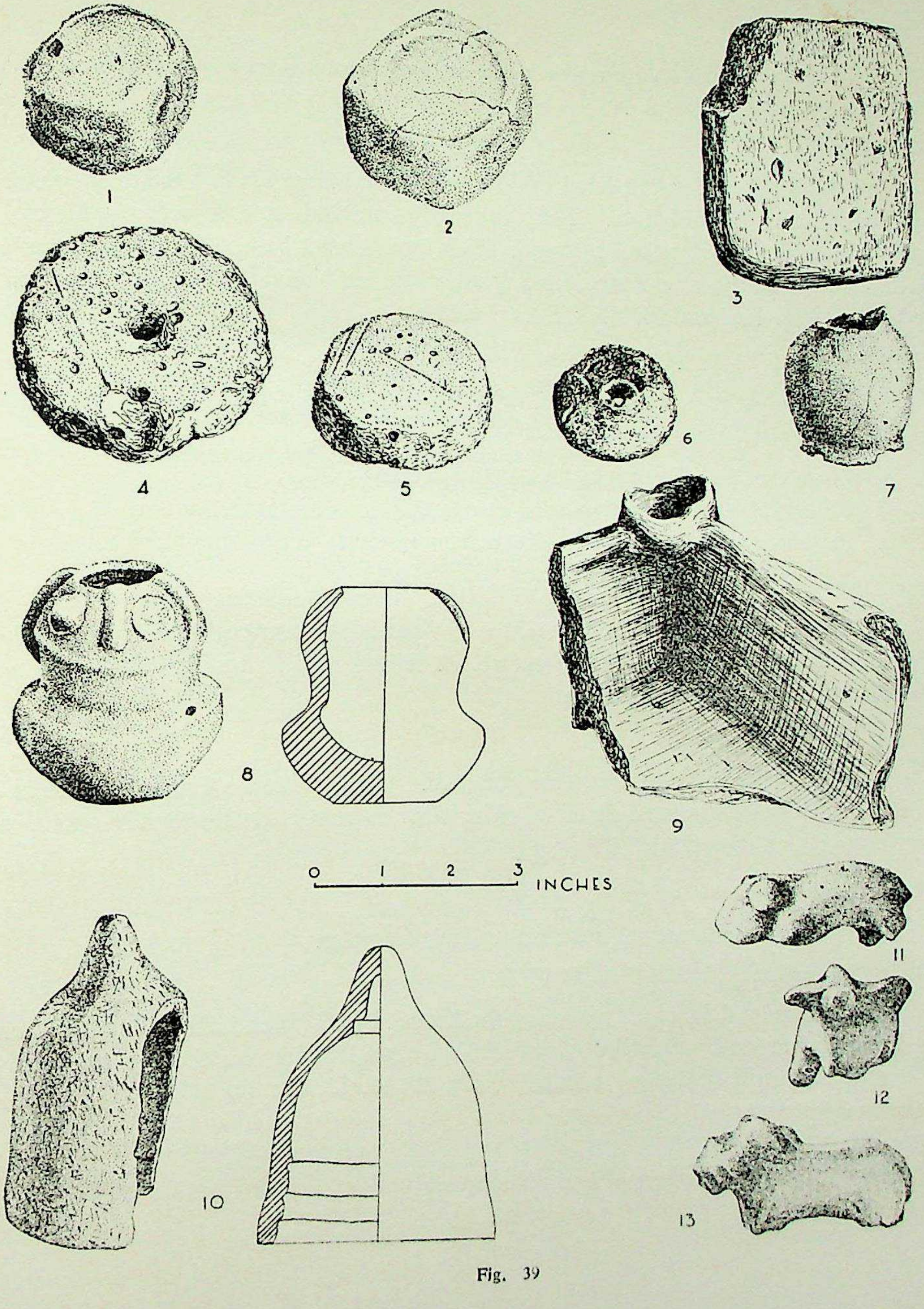

1
2
3
4
5
6
7
8
9
0 1 2 3 INCHES
10
11
12
13

Fig. 39

4. A circular positive sealing representing a stupa with probably some attendant figure. (Fig. 40, 3). (From the stupa).

Face Pot

A small pot with constricted middle part shows three applied bands in which are two circular applied dots. Their decoration reminds one of a face with two ears, eyes and a nose applied by hand. This pot has flat base. This wheel-turned pot seems to be the precursor of many wheel-turned votive objects that are seen today.[1] (Fig. 39,8 and Pl. XXV E).

Flesh rubbers (?) Pl. XXVI A).

Small cubic and rectangular bricks were obtained from the vihara. They might have been flesh rubbers.

1. One of them is a cubic object. (Fig. 39,1).
2. The other shows a circular depression on one side of it. (Fig. 39,2).
3. The third is a rectangular slab which is broken on one side. (Fig. 39,3).

Flat Discs

Flat discs are of two forms. One of them is thick unperforated type while the other has a perforation in the centre. The latter might be used as wheels or spindle whorls. (Fig. 39, 4-5-6).

Roof-tiles

Two varieties of roof-tiles were obtained. One of them is the rectangular fla-tile with two holes on one side of it. The other is a semi-triangular tile with two perforations on one side of it.

T. C. Balls

Two T. C. balls are of less than an inch diameter.

Animal figurines (Pl. XXV A, B, C, D.)

A few animal figurines represent the humped bull (4) and elephant (1) and an unidentified animal. One of the bulls has a perforation on the leg suggesting thereby, that it had attached wheels. (Fig. 39, 11, 12, 13; Fig. 40, 7, 8).

---

[1] "Face pots" were known in the Roman World at least in the second-third Century A.D. cf. pots from Colchester in J. M. C. Toynbee, *Art in Roman Britain*, Fig. No. 185,189, also p. 192, Phaidon, 1962.

Negatives

Two terracotta negatives were obtained. One of them, that of a triratna symbol, is a red negative of oval shape (Fig. 40, 1). The other is a red round negative of four petalled flower. (Fig. 40, 2 and Pl. XXV F.).

Crucible

A small crucible of red colour and fused outer surface was obtained from the vihara I (Fig. 40, 4)

Beads (Fig. 41, 1 to 9 and Pl. XXVI B).

Nine beads of terracotta and semi-precious stones were obtained from the excavations. Their varieties are as follows:

1. A terra-cotta areca nut bead with a hollow in the centre of its flat base.
2. A terra-cotta areca nut bead with truncated top.
3. A byconical hexagonal bead of crystal.
4. A hexagonal pendant with two holes perforated across its longer axis.
5. A barrel shaped bead of carnelian.
6. A short tubular bead of jasper.
7. A spherical bead of jasper.
8. A variant of no. 3 but of microline.
9. A small globular blue glass (?) bead.

Gems for setting

A semi spheroid crystal with a flat side seems to be a gem, set either in a finger ring or a necklace.

A similar quartz piece is much smaller than the crystal.

Metal objects

Objects of gold, silver, copper, lead, iron and zinc have been discovered from the excavations. Silver and copper are used mostly for coins which are treated separately. The other objects are fragments of bangles (Pl. XXVIII B).

The zinc and lead objects are of indescribable nature, but one lead piece has a tang and other is a coil of wire (Pl. XXVIII B)., which was obtained from Room No. 9, Vihara I.

The gold objects include some foils and a triangular indented object which might have been a triratna symbol and one pendant like object (Pl. XXVIII C)

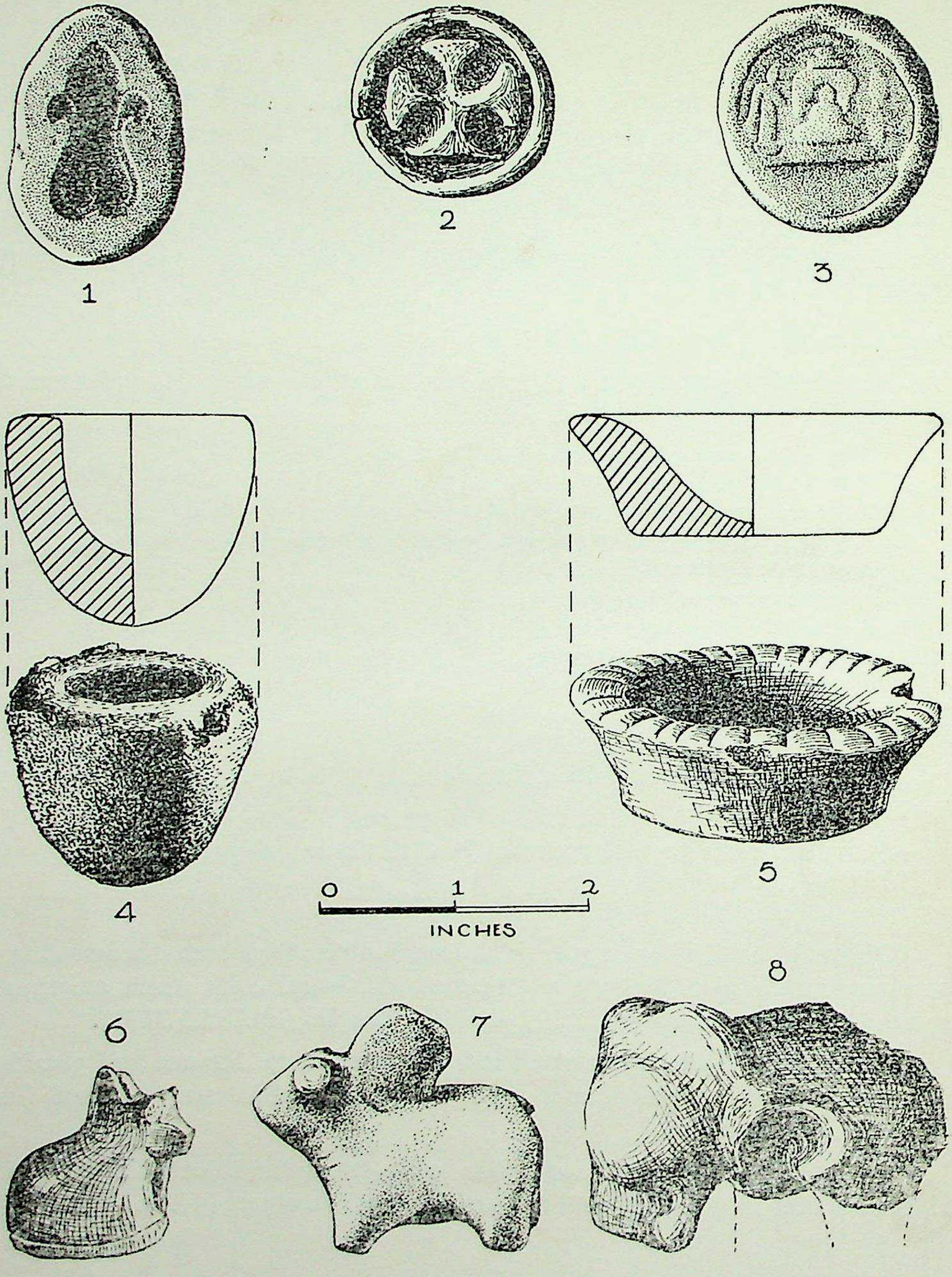

1
2
3
4
5
0
1
2
INCHES
6
7
8

Fig. 40

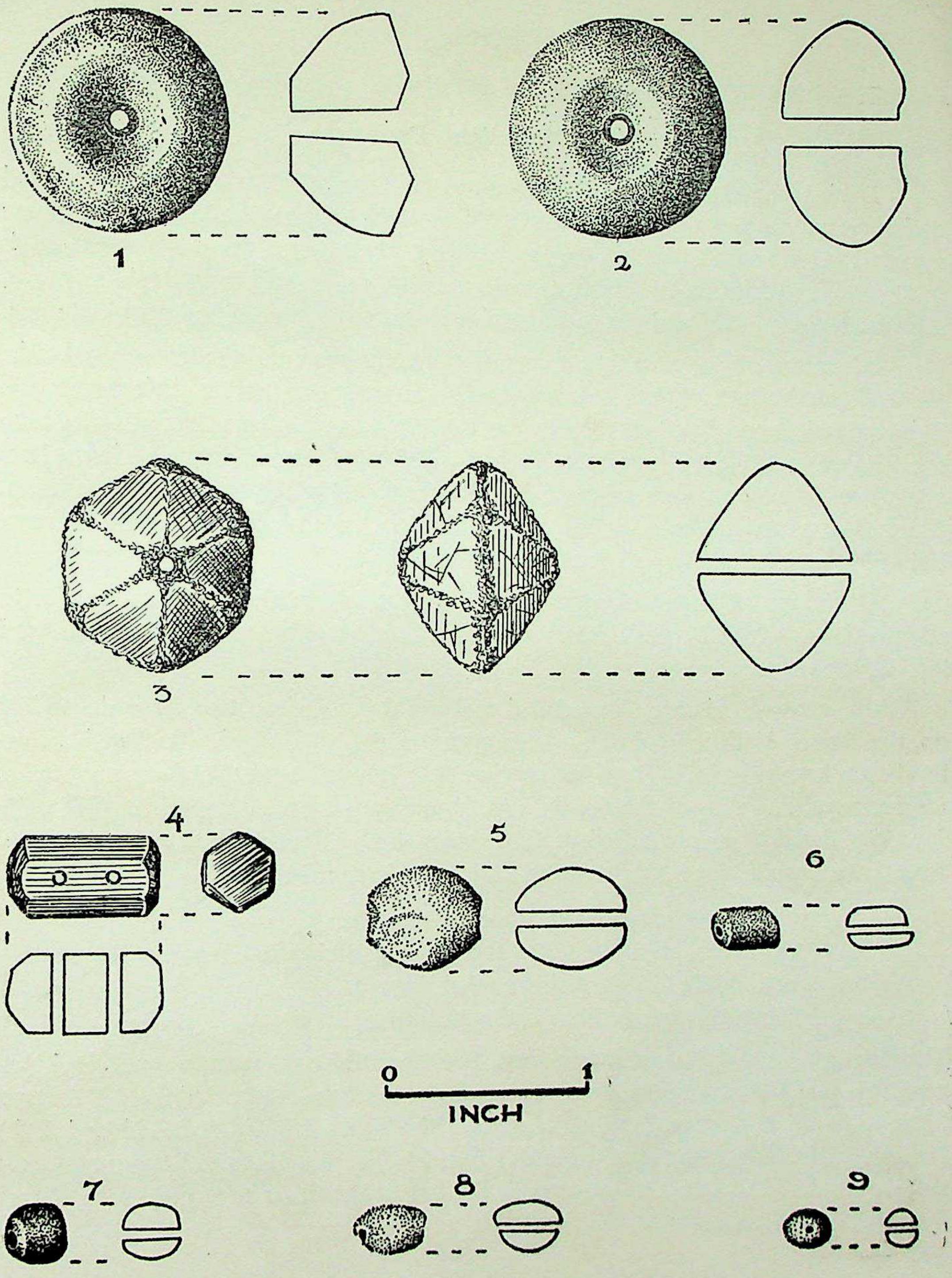

1
2
3
4
5
6
0
1
INCH
7
8
9

Fig. 41

The details of the iron objects are as follows:

Iron Objects from Devnimori

During the three seasons' excavations at Devnimori, about three hundred and seventy-two iron objects are recovered, of which three hundred and forty are nails. The rest of the iron objects comprise, three arrow-heads, a spear-head, five knives, two daggers, two rings, a sickle, a chisel, a pick, a frying trowel (*tavetha*), scissors, a door-chain and a hook, besides a dozen objects of indeterminate use.

It is interesting to note that excepting the spear-head and the few arrow-heads, the bulk of the iron objects belongs to the class of structural and domestic use. The preponderance of nails at the site, most of them coming from the ruins of vihara can also be explained. They were perhaps used for fixing tiles to wooden rafters of the roof of vihara. A number of flat tiles are found in the course of excavation. A similar method of construction was noticed at several other sites in Western India: Nevasa, Nasik, Karad, Prakash, Bahal and Ter.

All the iron objects belong to a period from about 3rd-4th century A.D. to about 7th century A.D. and later. The classification is based on the section and form of the objects.

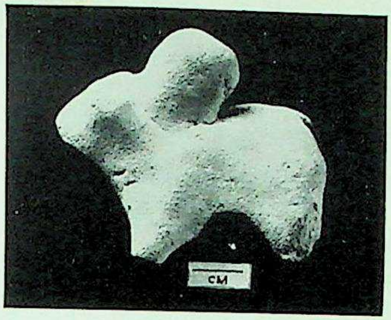
The arrow-heads are all socketed and are divisible into two types depending on the shapes of their blades: (a) triangular and (b) Barbed. Socketed arrow-heads are known in India from 6th century B.C. onwards and they frequently figure at the megalithic sites of the South. At Sisupalgarh there is a specimen (Fig. 10, No. 18), dated to as late as 3rd or 4th century A.D. Socketed arrow-heads, therefore, have a wide range of circulation in time and space in India.

Among the knives are noticed, three different forms:

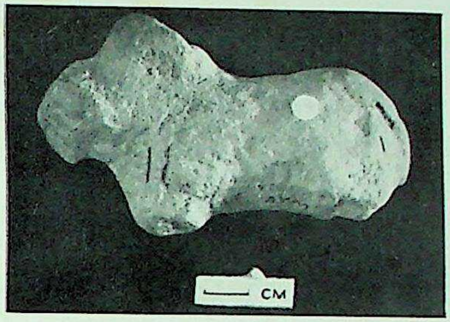
(a) straight backed knife with tapering edge and pointed end:
(b) parallel sided blade with rounded tip and
(c) knife with concave back and upturned tip.

The first two are quite common forms, but the third one is more specialised type probably used for cutting leather. Parallels for this type can be had from Kausambi (Fig. 7, No. 36), Besnagar (*A.S.I.A.R.*, 1913-14, Pl. LXIII, Nos. 134 and 135), Nevasa (Fig. 188, No. 9) and Nasik (Fig. 54, No. 4). At the former two sites, they were dated to circa 5th century A.D., but at the other two, they were at least five or six centuries earlier.

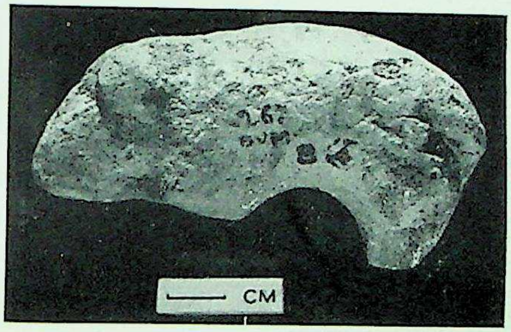
PLATE XXV



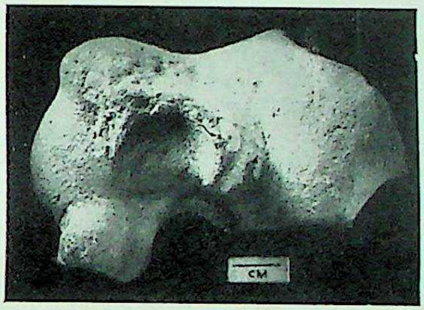
A Bull



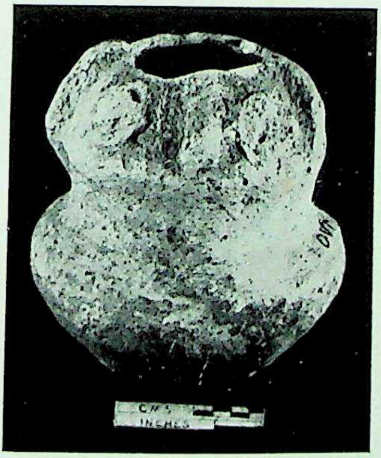
B Elephant (?)



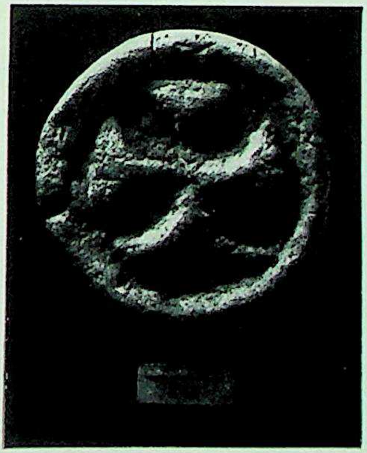
C Unidentified animal



D Elephant



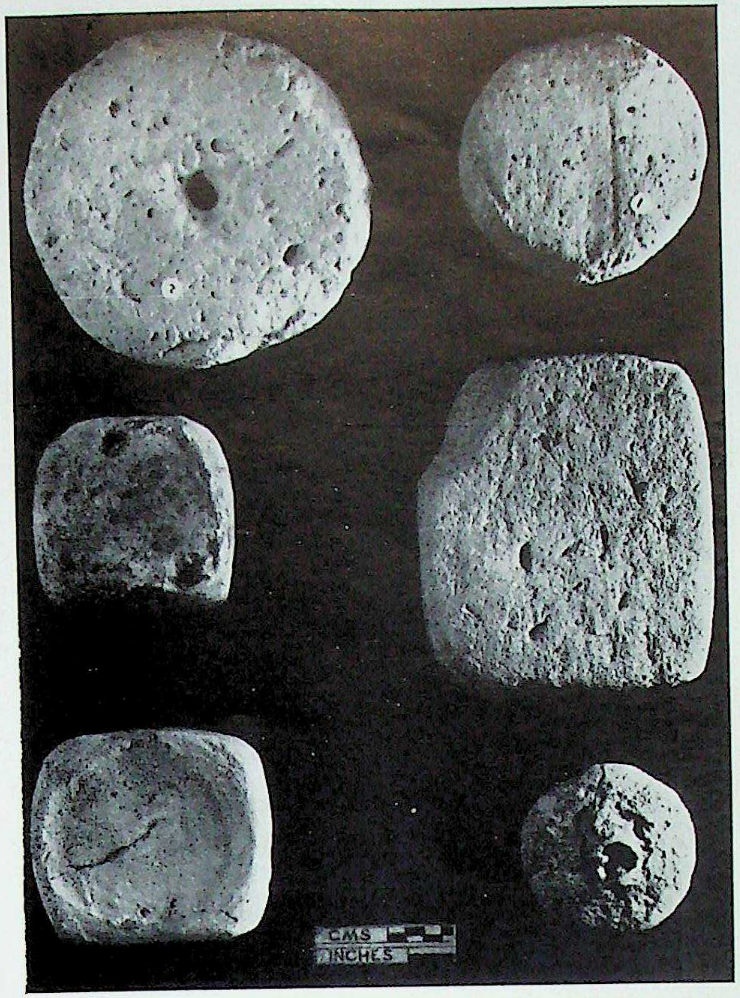
E Face-Pot



F Die of four petalled flowers

P.T.O.

PLATE XXVI


1
4
2
5
3
6
CMS
INCHES

A. 1 & 6 perforated discs or wheel. 2, 3, 5, flesh-rubbers (?)
4 Unperforated disc.

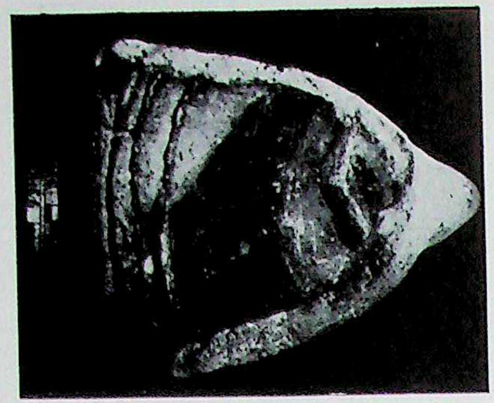
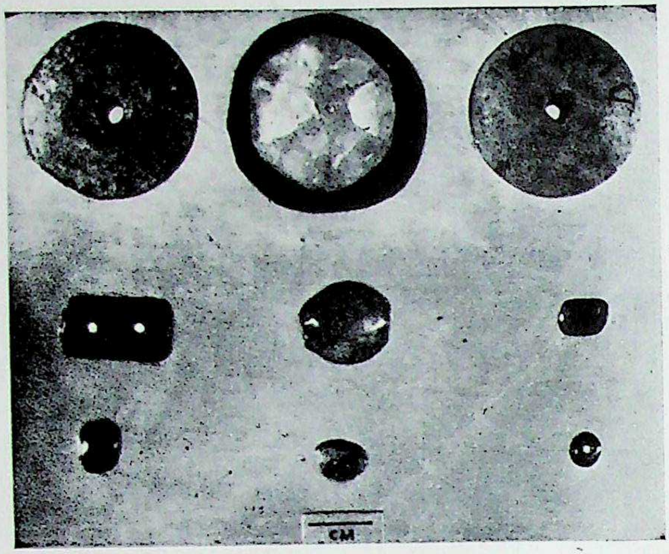


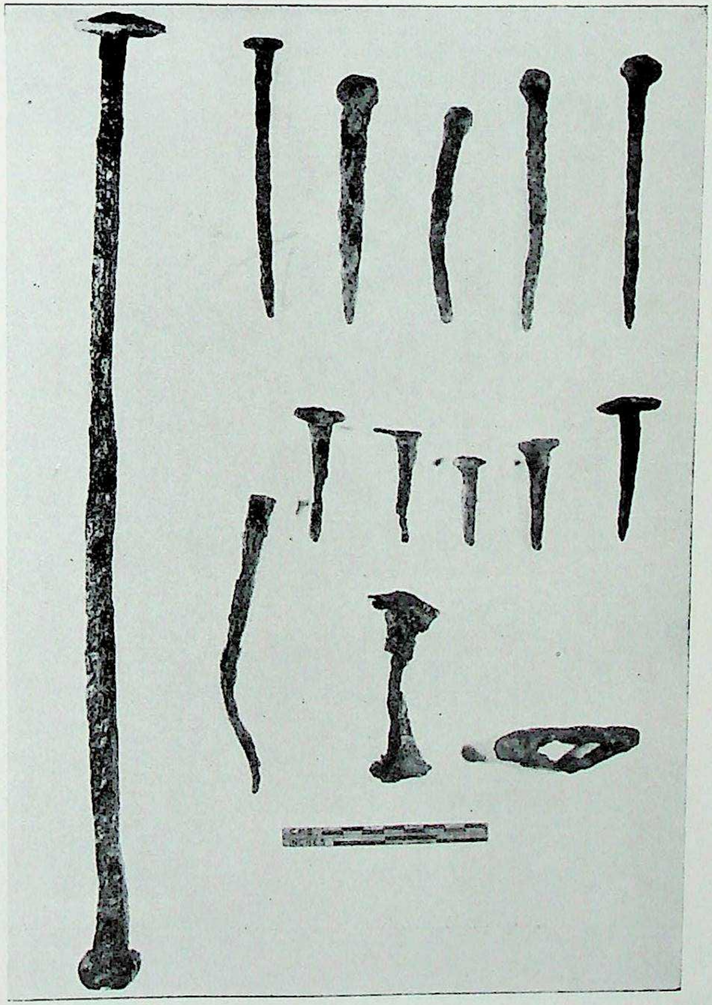
PLATE XXV G Negative of Stupa


1
3
2
4
5, 6
CM
7
8
9

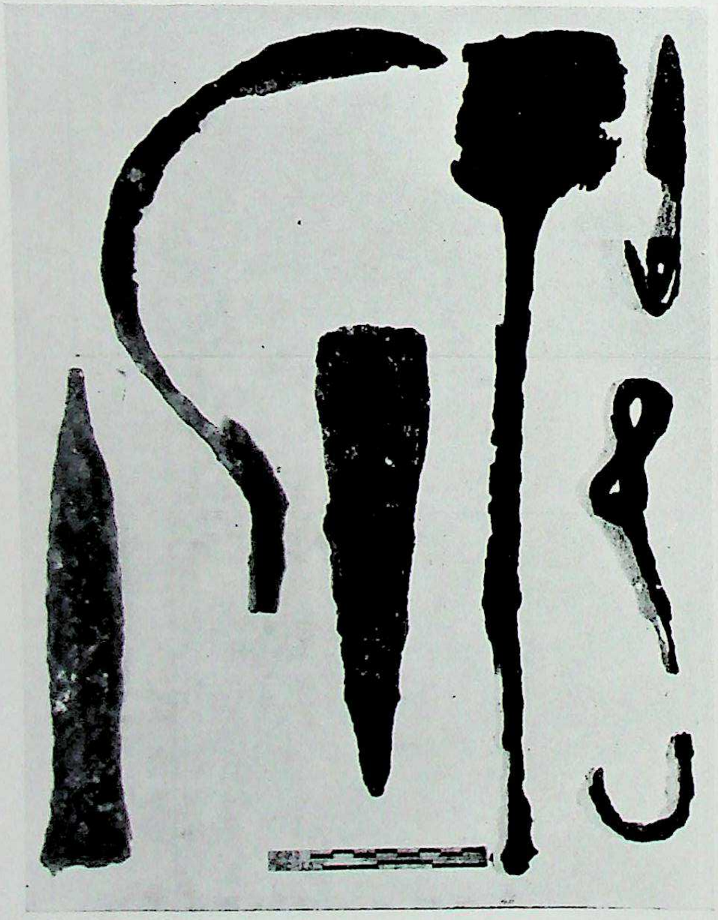
Beads

PLATE XXVII

CC-0. Agamnigam Digital Preservation Foundation, Chandigarh

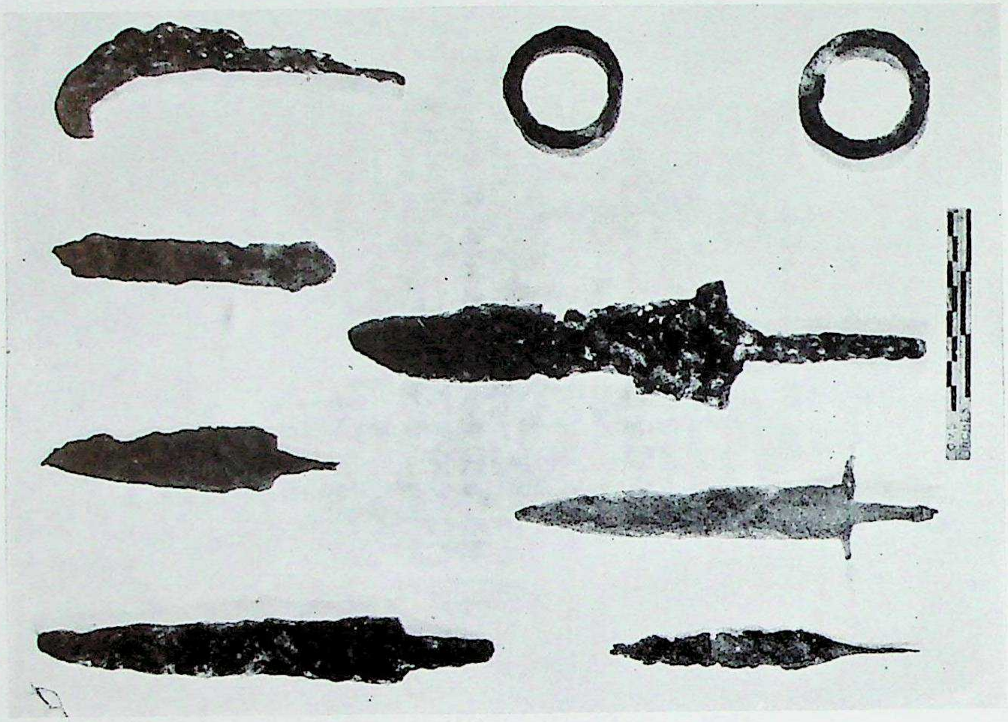


A. Iron objects



B. Iron objects

PLATE XXVIII

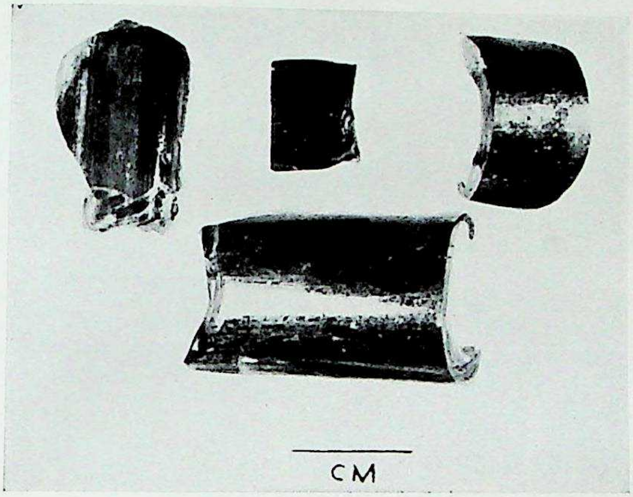


A. Iron objects

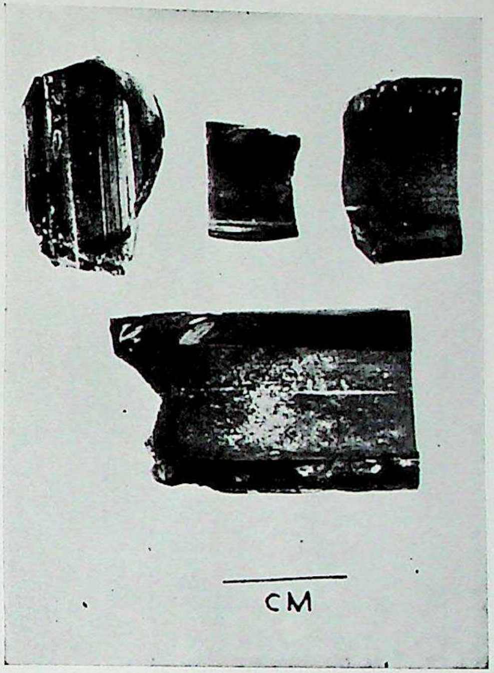
B. Lead and copper objects

C. Gold objects

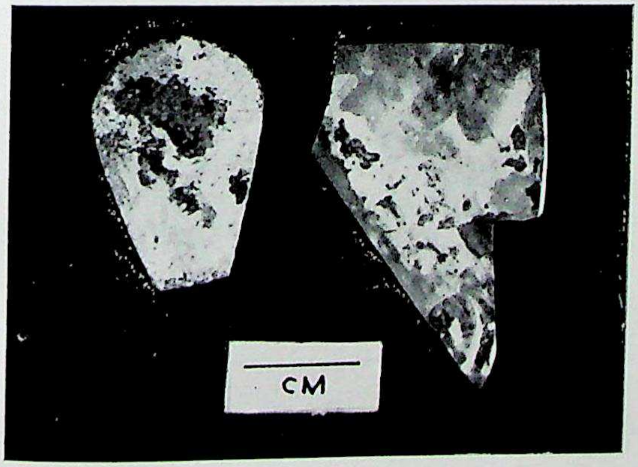
PLATE XXIX



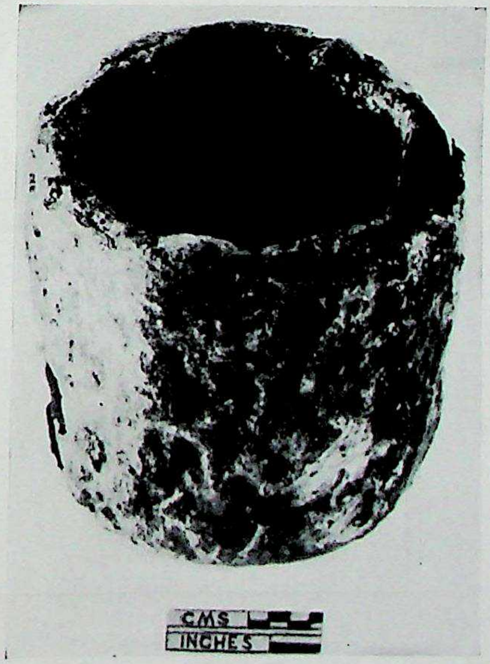
A. Fragments of Glass bottle.



B. Fragments of Glass bottle.

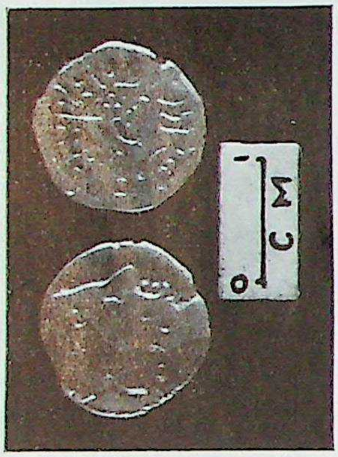


C. Glass objects.

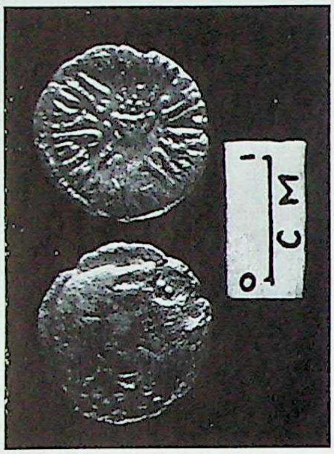


D. Iron object.

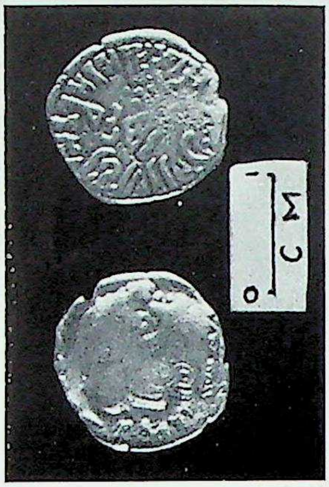
PLATE XXX



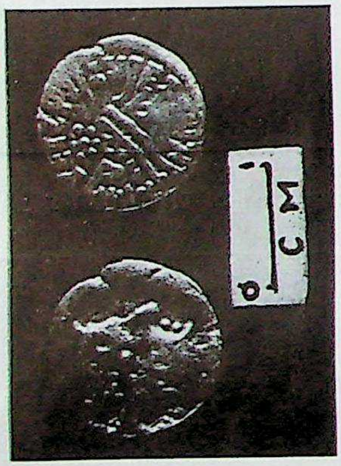
A Coin of Bhartrudaman



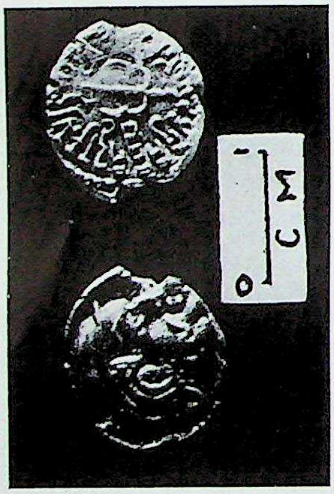
B Coin of Rudrasena



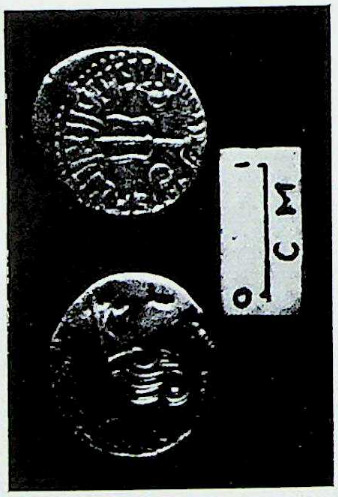
C Coin of Vishvasena



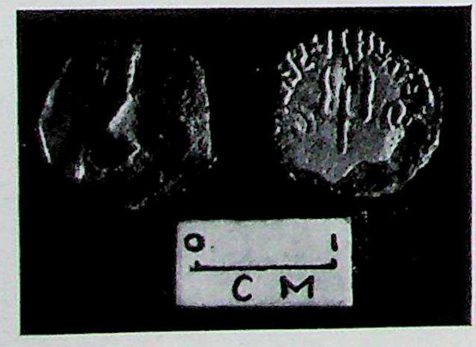
D Coin of Vishvasena



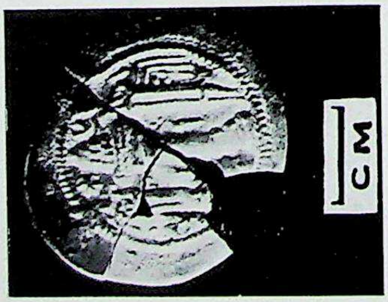
E Maitraka coin



F Maitraka coin

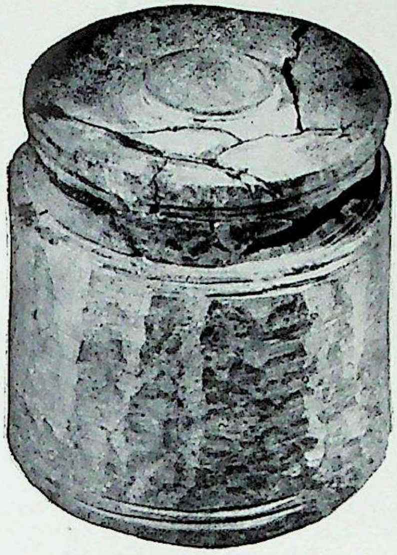


G Maitraka coin

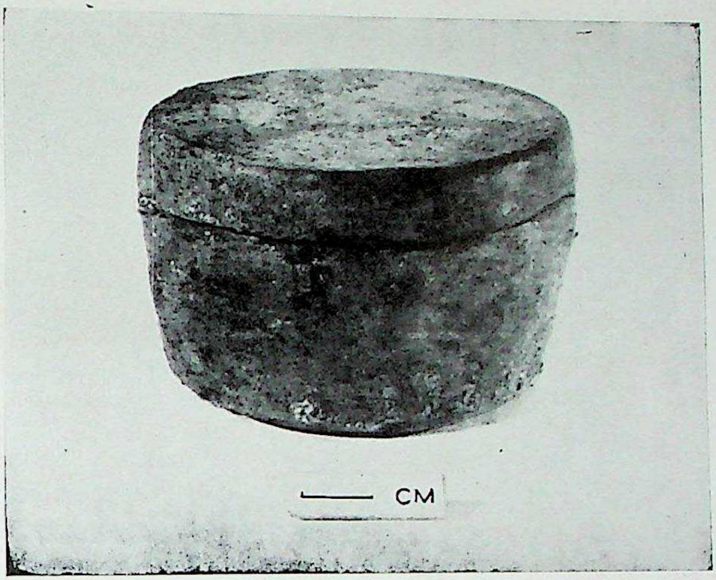


H Indo-sassanian coin
(Reverse only)

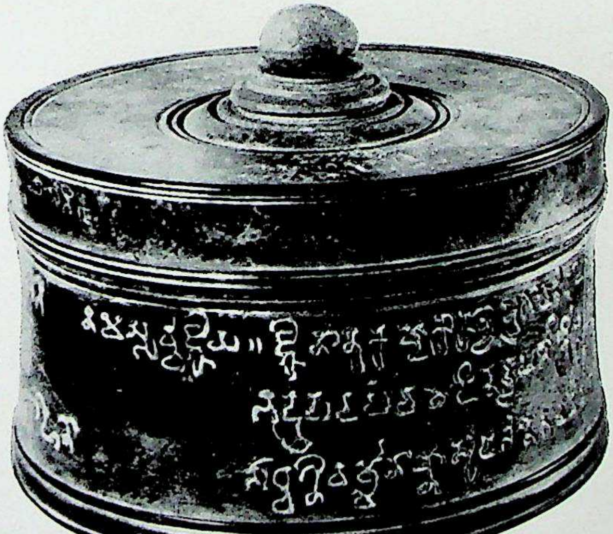
PLATE XXXI



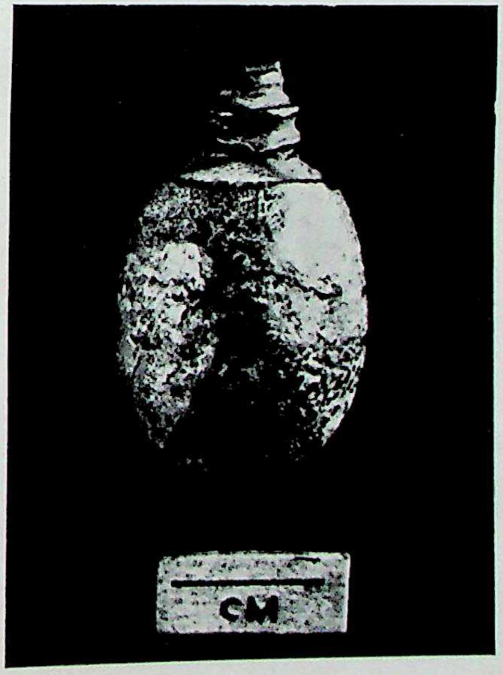
Casket I



C Copper box in casket II

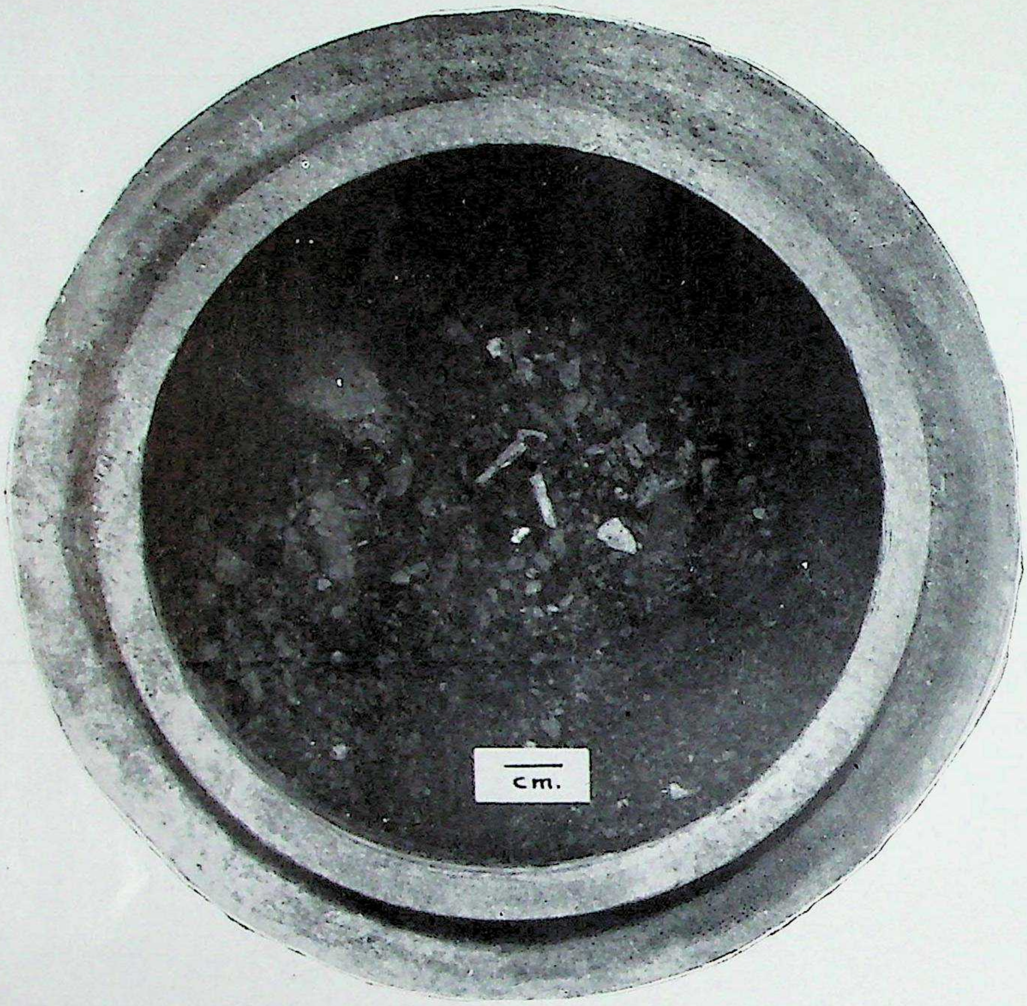


B Casket II



E Gold bottle in the copper box in casket II

PLATE XXXII



Contents of casket II

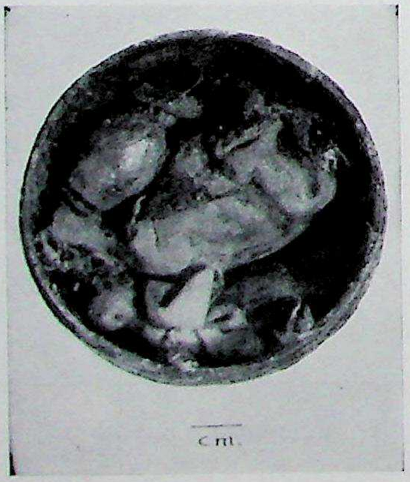
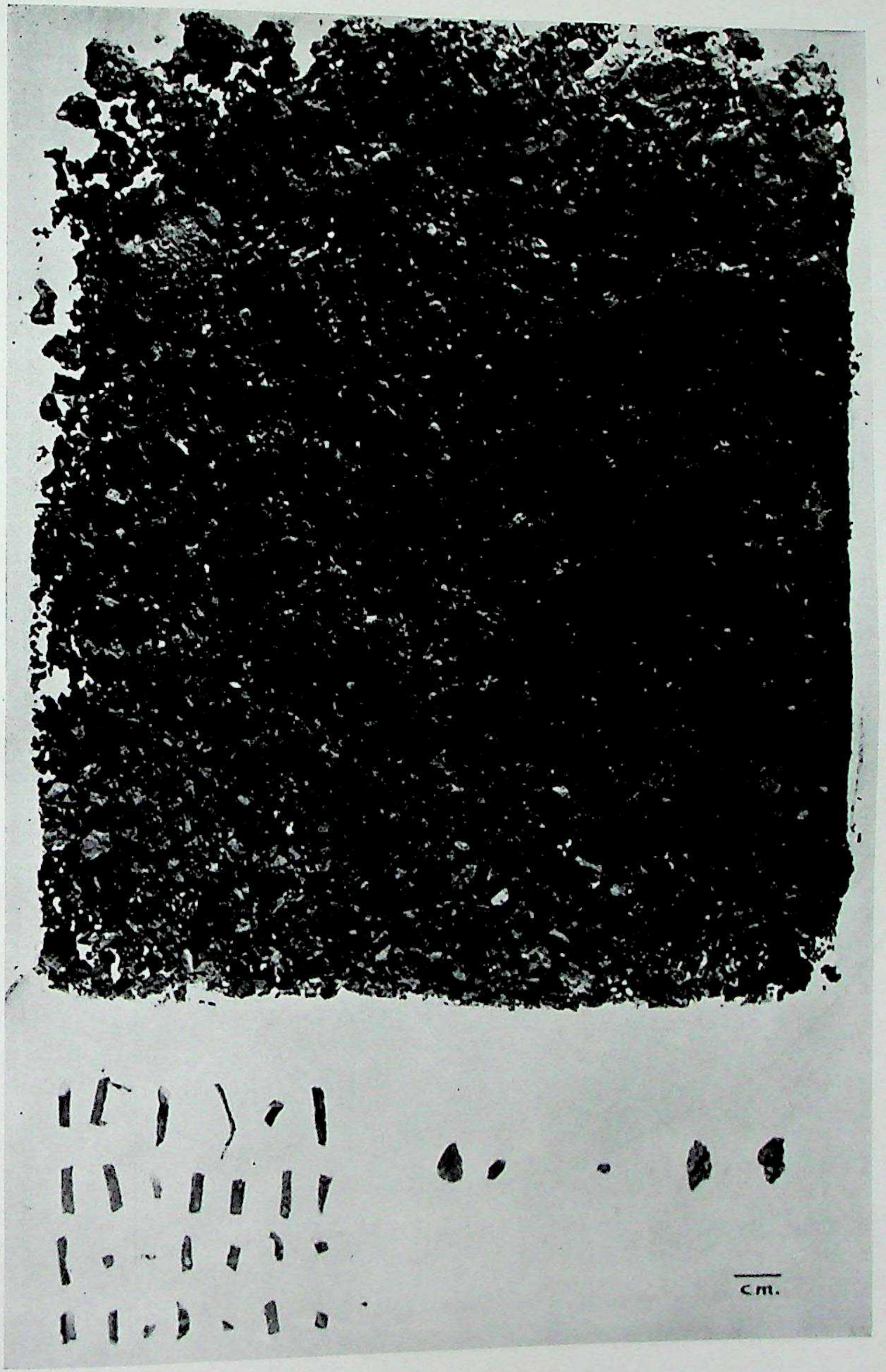


PLATE XXXI D

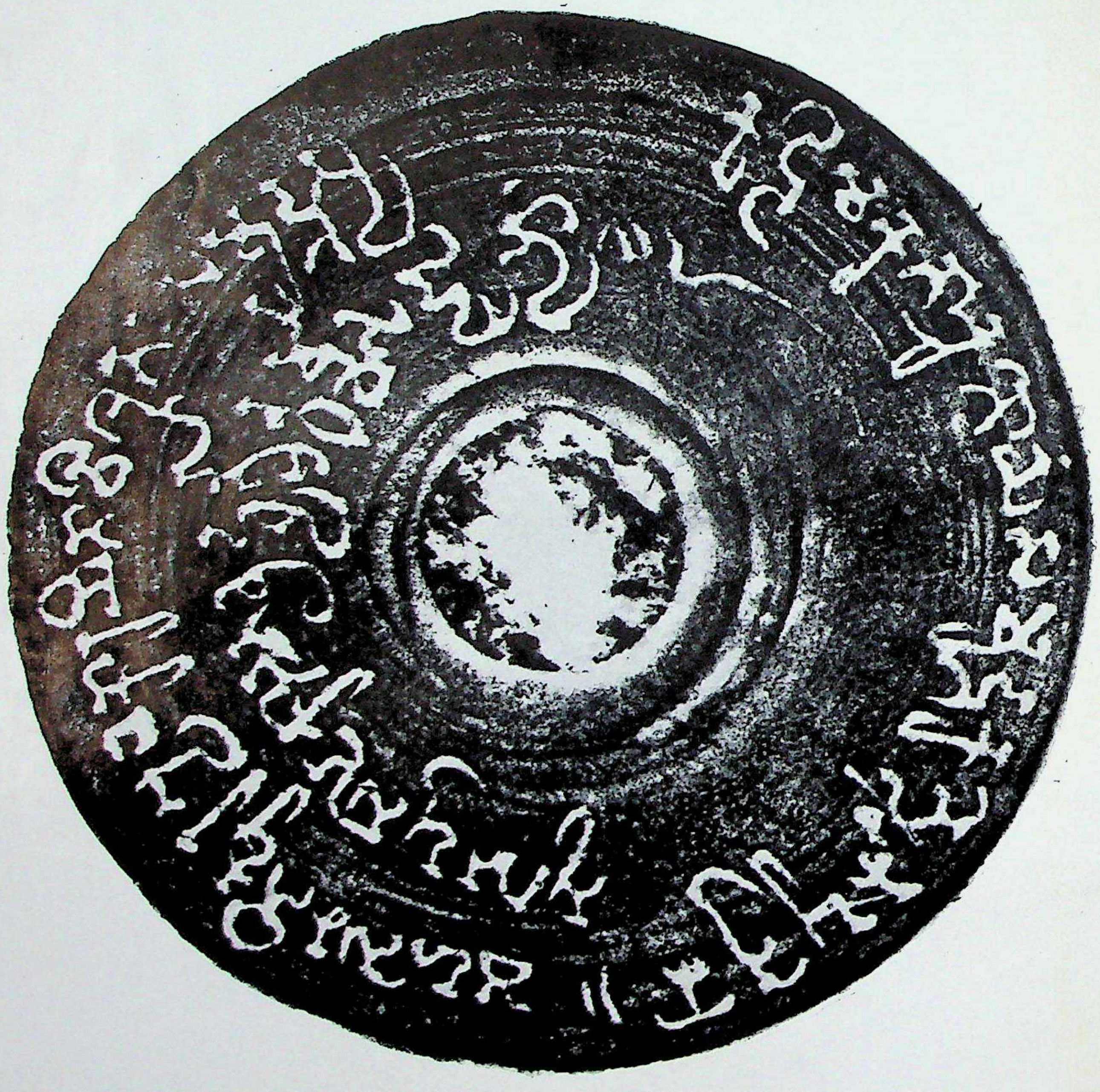
D Contents of copper box

PLATE XXXIII



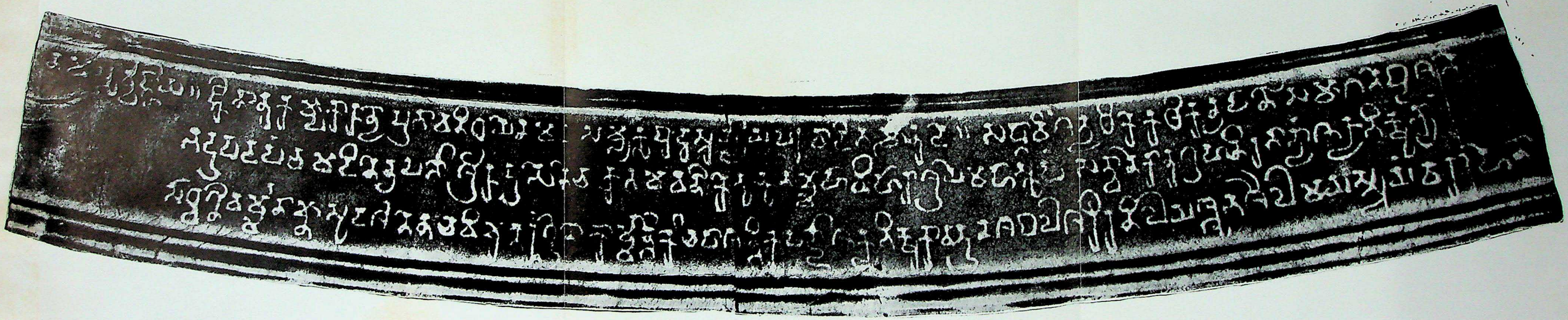
Contents of casket II (spread out)

PLATE XXXV

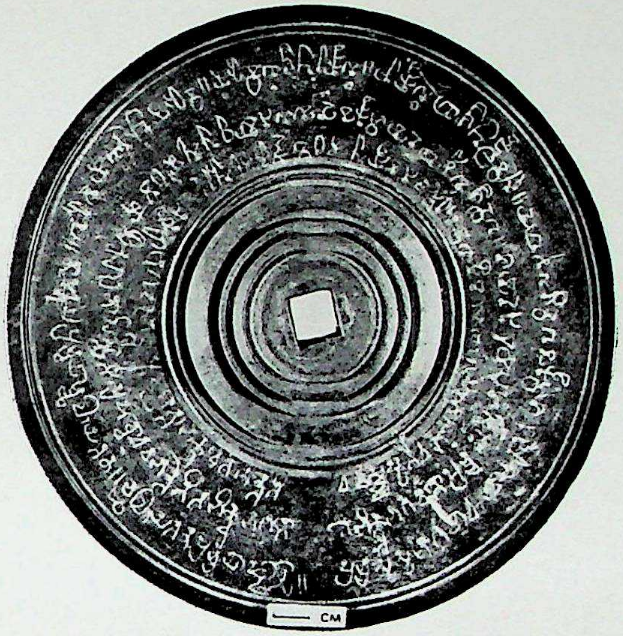


Inscription on the base of Casket II

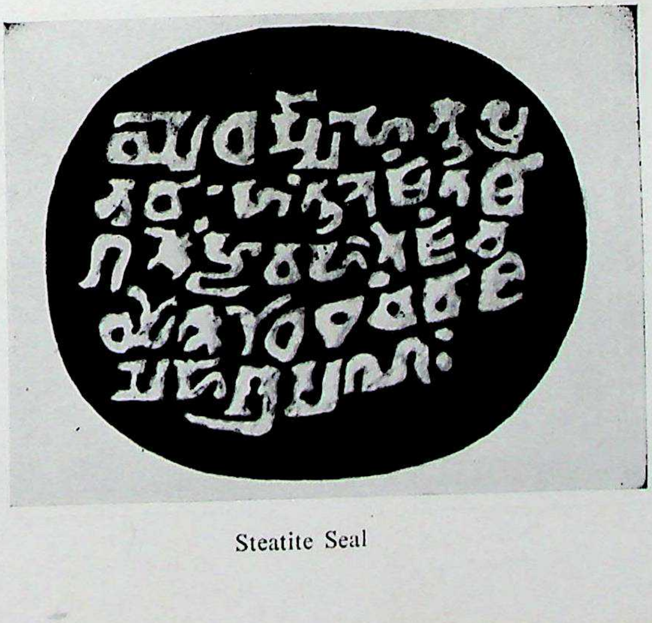
PLATE XXXIV



Inscription on the body of Casket II

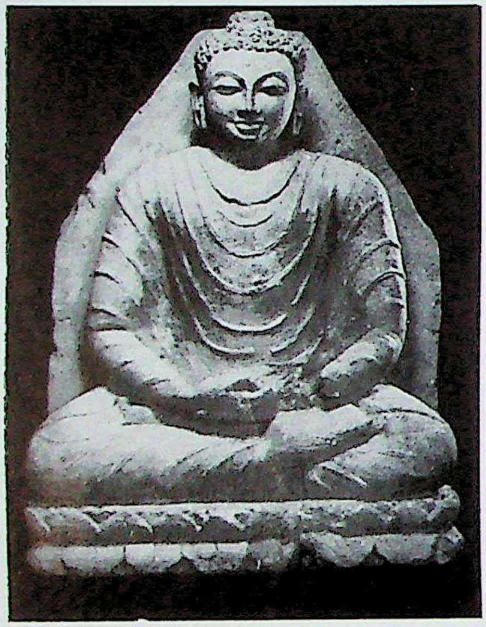


Inscription on the lid of Casket II

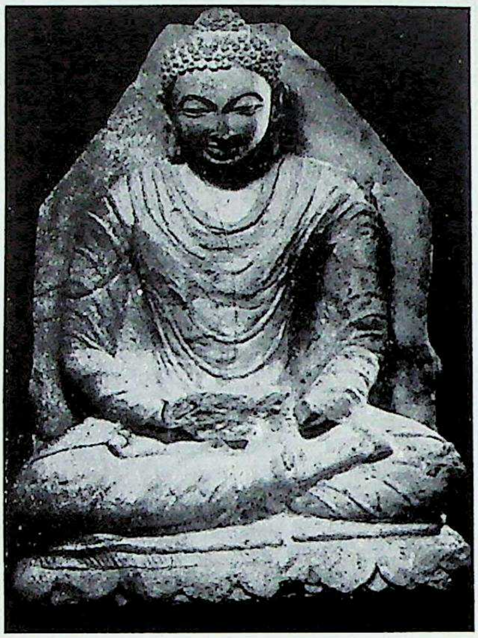


Steatite Seal

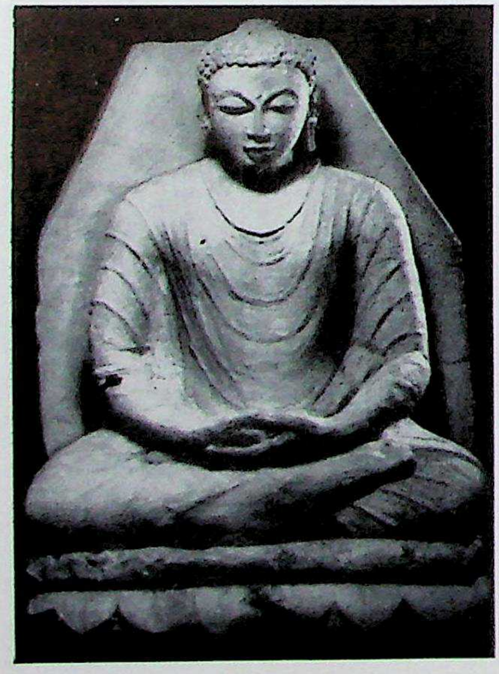
PLATE XXXVII



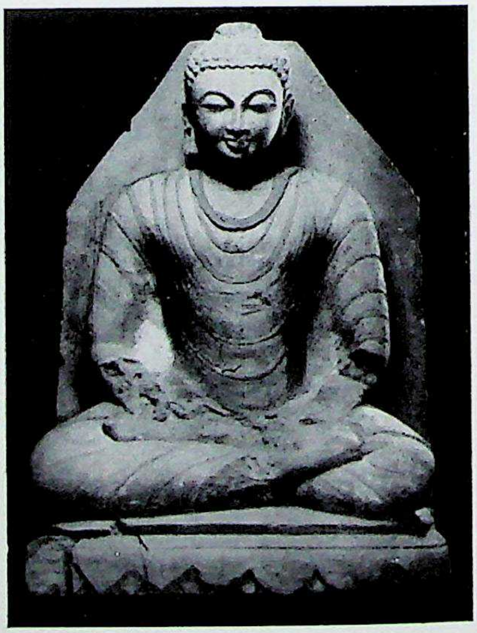
A Buddha from Mahastupa



B Buddha from inside of Mahastupa

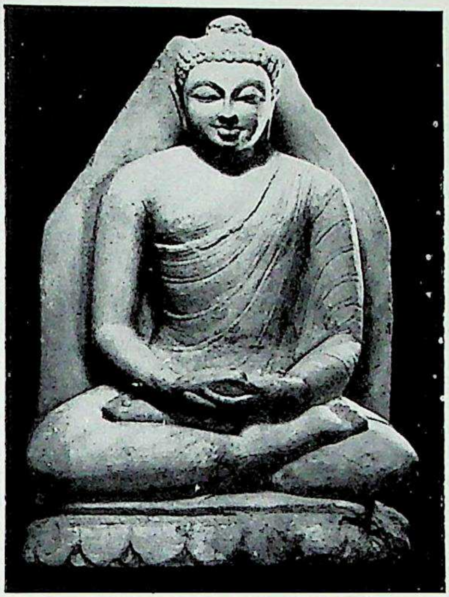


C Buddha from Mahastupa

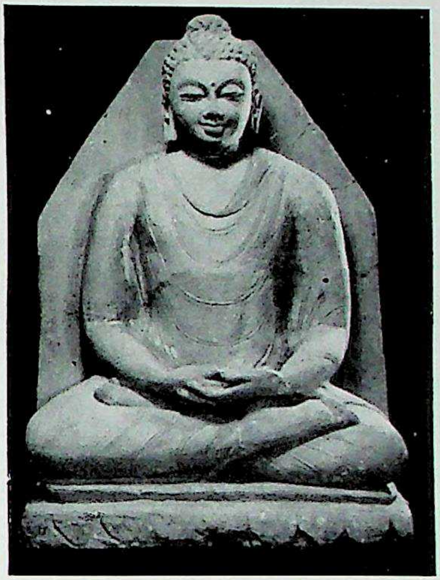


D Buddha from Mahastupa

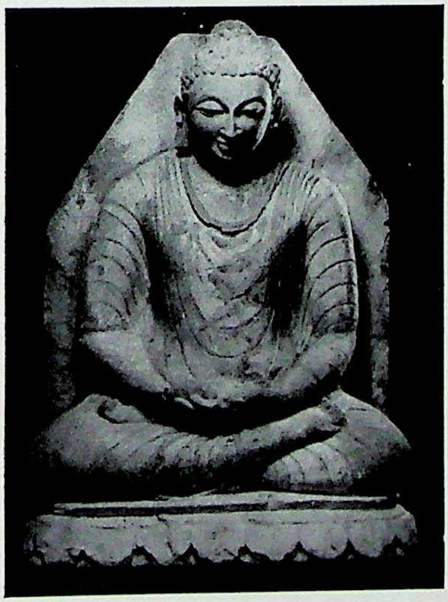
PLATE XXXVIII



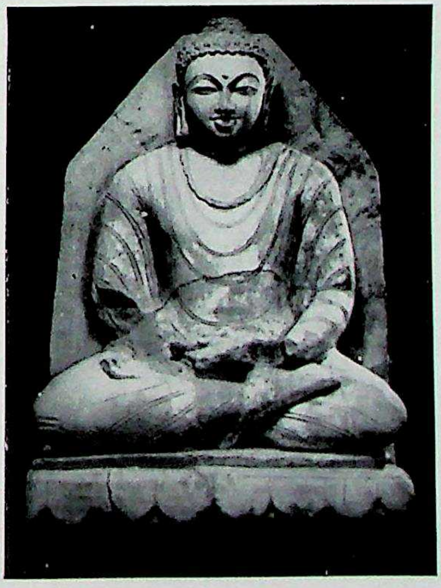
A Buddha from Mahastupa



B Buddha from Mahastupa

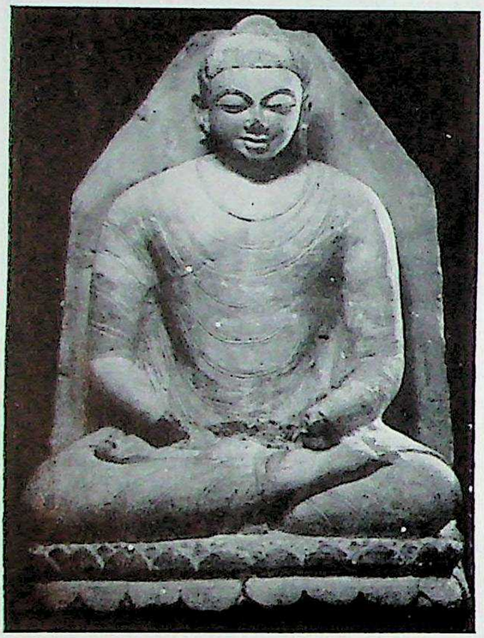


C Buddha from Mahastupa

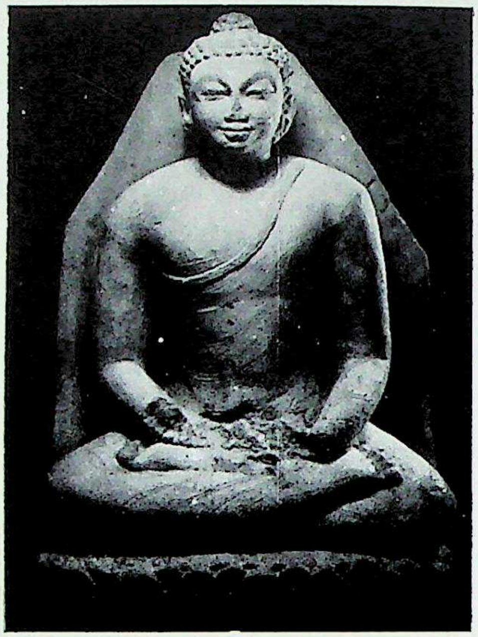


D Buddha from Mahastupa

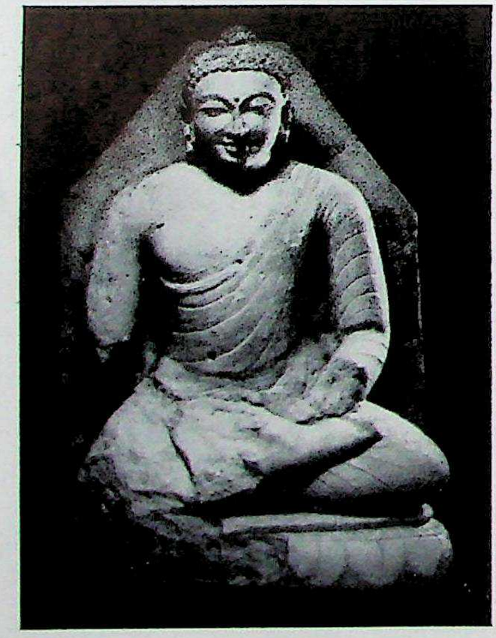
PLATE XXXIX



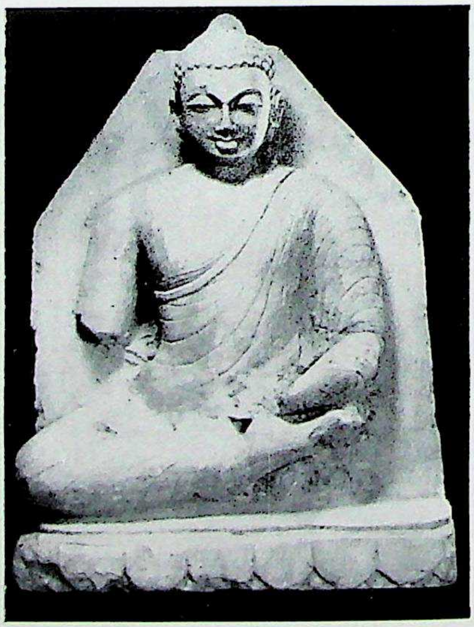
A Buddha from inside of Mahastupa



B Buddha from Mahastupa

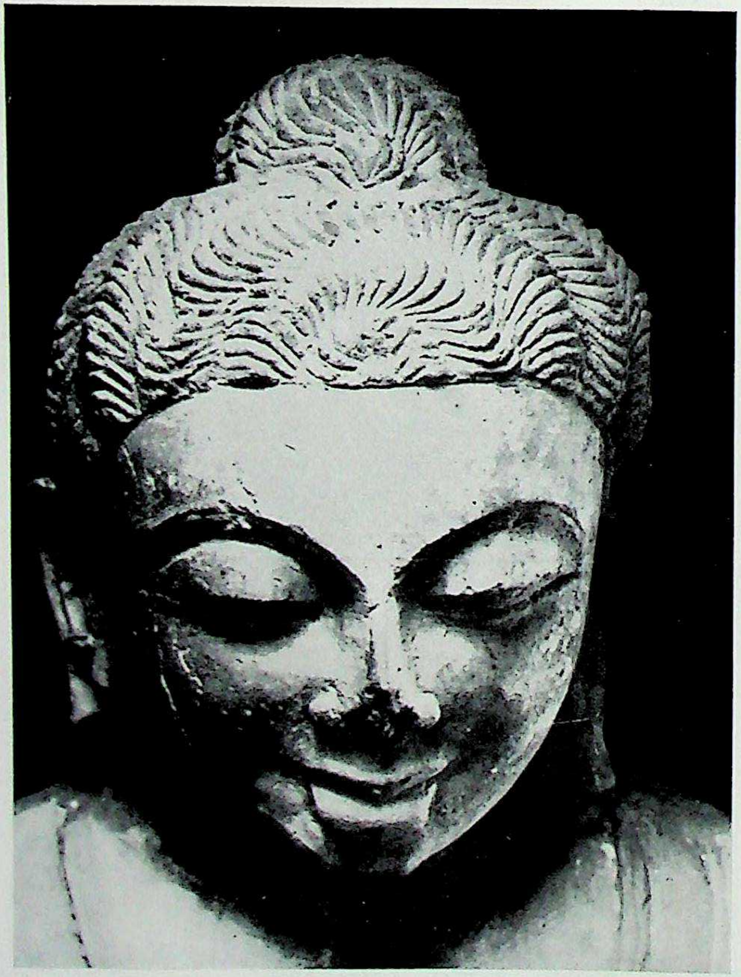


C Buddha from Mahastupa

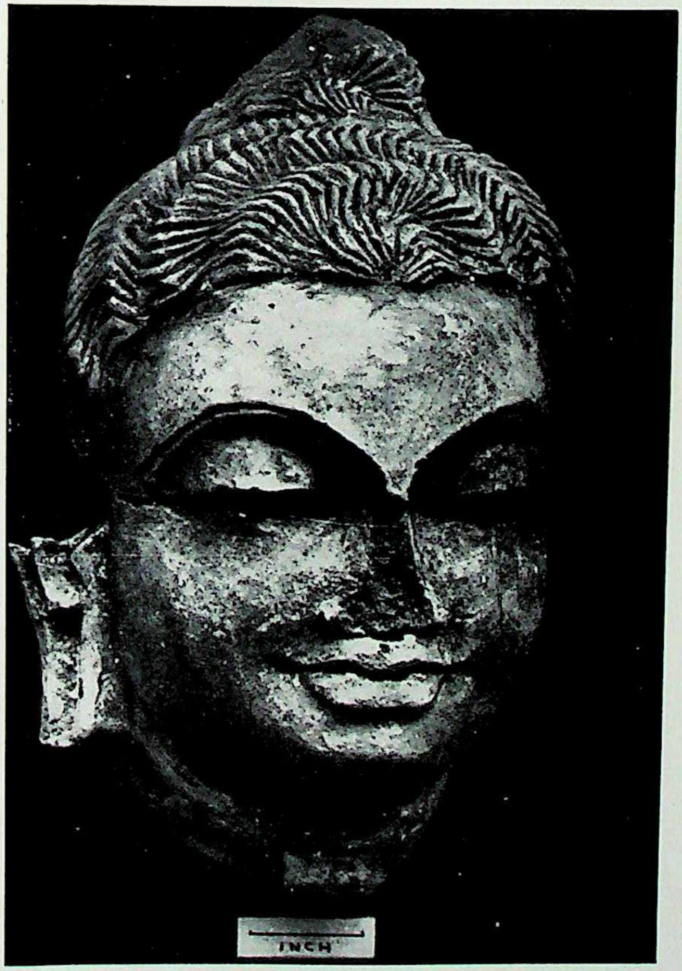


D Buddha from Mahastupa

PLATE XL

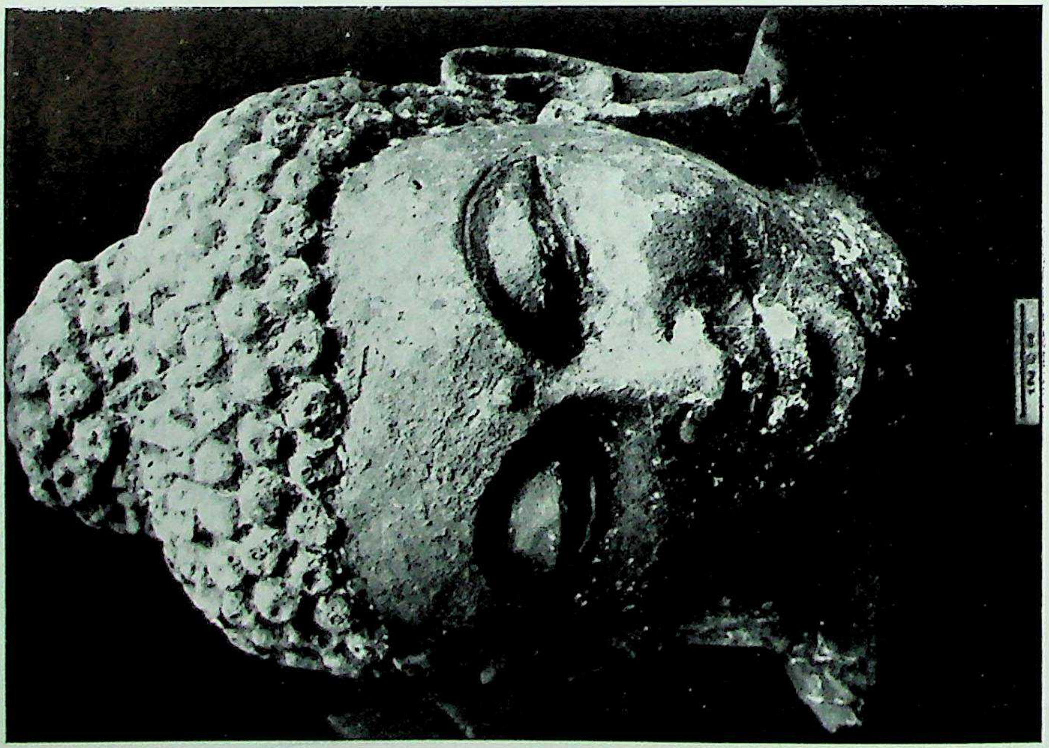


B Close up of Buddha head from inside the Mahastupa. Round face wavy hairstyle

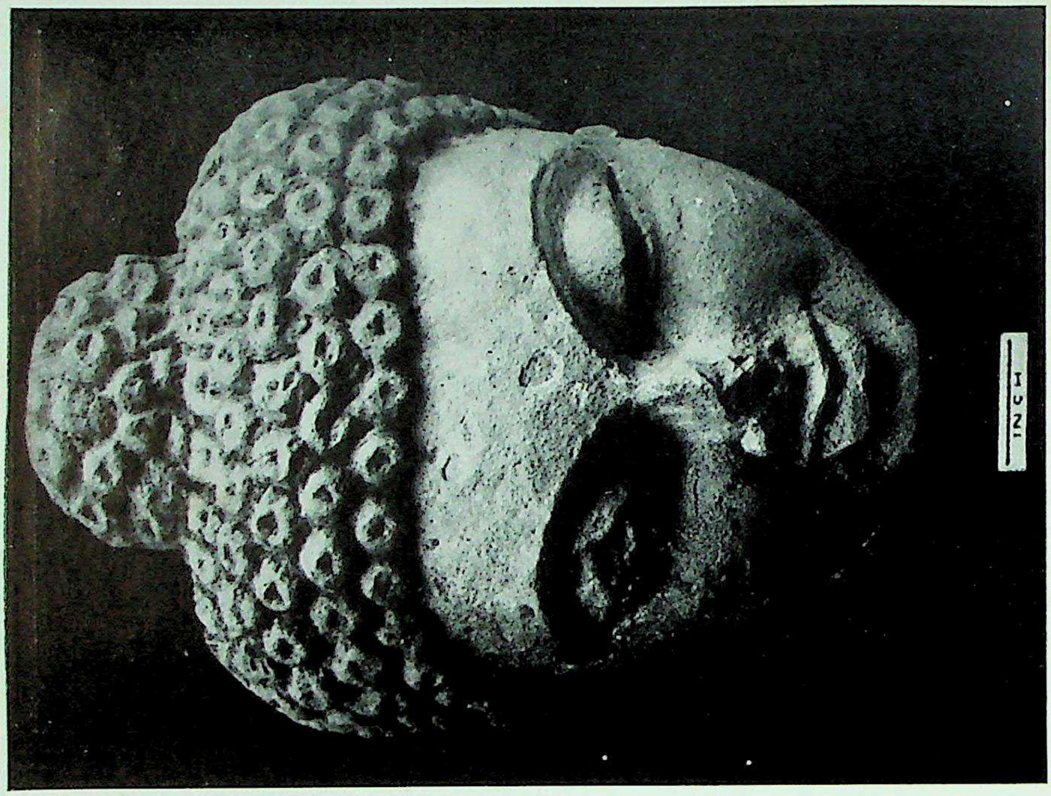


A Buddha head from outside the Mahastupa. Oval face, wavy hairstyle

PLATE XLI



A close up of a Buddha-head from Mahastupa.
Almond shaped face



B close up of a Buddha head from Mahastupa, Round face

The general classification of the nails depending on the cross section of their shanks is into (a) square and (b) circular represented by 322 and 18 specimens respectively. They are however divided into various sub-types, on the basis of the shapes of their heads:

1. Nails with flat head.
2. Nails with knobbed head.
3. Nails with folded head.
4. Nails with hood-like head.
5. Hammer headed nails and
6. Nails with featureless head. The last two sub-types are not represented in the forms with circular cross-section. Similarities for a majority of the above sub-types can be cited from Sisupalgarh, dated at the site to 3rd century A.D. But, for the hammer-headed nails, there is only one example from Mohara Moradu, Taxila (No. 153) dated to 5th century A.D.

Coming to the other objects from Devnimori, the spear-head, rings, sickle, chisel and hook are all quite common forms with a wide range of occurrence in India. Both the daggers are provided with cross-guards at the hilt. Daggers with cross-guards are known at Taxila from 1st century B.C., onwards but they differ from the present ones in having a ribbed blade. There is one specimen in the Madras Museum, but its date and provenance are uncertain. With regard to the pick, a similarity can be seen in specimens Nos. 141-a to c from Taxila, dated there to 1st century A.D. Frying trowels dated between 1st and 3rd centuries A.D. are known from Arikamedu, Sisupalgarh, Nevasa and Taxila. The door chain has its parallels at Taxila, where the earliest one is dated to 1st century A.D. However, there are four rods rivetted with flat strips at one end, classified under the miscellaneous category, for which no parallels can be offered.

Description of Individual types:

I. *Arrow-heads*

Type: a

1. Socketed arrow-head with triangular blade. One side partly broken. Length 9.5 cms. Vihara, Layer (1).

2. Similar to the above, but parts of blade and shank missing. Length 5.6 cms. **Vihara.**

Type: b

3. Socketed and barbed arrow-head, tip of the blade missing. Length 9.2 cms.

II. *Knives*

Type: a (Fig. 42, 1-2-3 and Pl. XXVIII a.)

1. Straight backed knife of triangular cross-section with squarely cut shoulders and the edge tapering towards the pointed tip. Length 18.6 cms. Stupa Layer (1).

2. Similar to the above, but the blade is thinner in section, and the edge tapers more acutely. Part of the tang missing. Length 12.2 cms.

Type: b

3. Parallel sided knife with single shoulder and rounded tip. Part of tang missing. Stupa Layer (2).

4. Similar to the above, but much corroded. Stupa Layer (1).

Type: c

5. Knife with concave back and upturned tip. Length 15 cms. (Fig. 42, 4).

III. *Daggers*

1. Double edged dagger with tapering blade and a tanged hilt provided with an elliptical cross-guard. Length 22 cms. Stupa. (Fig. 42, 7).

2. Similar to the above; but the blade is narrower. Length 17 cms. (Fig. 42, 6).

IV. *Spear-Heads*

1. Tanged spear-head of leaf shaped blade with thin cross-section. Length 12.5 cms. (Fig. 42, 5).

V. *Rings*

1. Iron ring made of a flattened strip of metal diameter 5.4 cms. Layer (2) (Fig. 42, 8).

2. Similar to the above; diameter 5 cms. Layer (2) (Fig. 42, 9).

VI. *Sickle*

1. Complete specimen of a sickle with a wide gathering curve. Stupa (Fig. 43, 10).

VII. *Chisel*

1. Chisel of cylindrical shape tapering towards one end for inserting in a wooden handle; and thinning towards the other to form a symmetrical cutting edge. Length 23.5 cms. Diameter in the middle 3.6 cms. Floor of Vihara 1 (Fig. 43, 12 and Pl. XXVII B).

VIII. *Pick*

1. Socketed pick with a flattened heel and a slightly curved four sided blade tapering towards the point. Length 22 cms. Vihara debris. (Fig. 43, 13 and Pl. XXVII B).

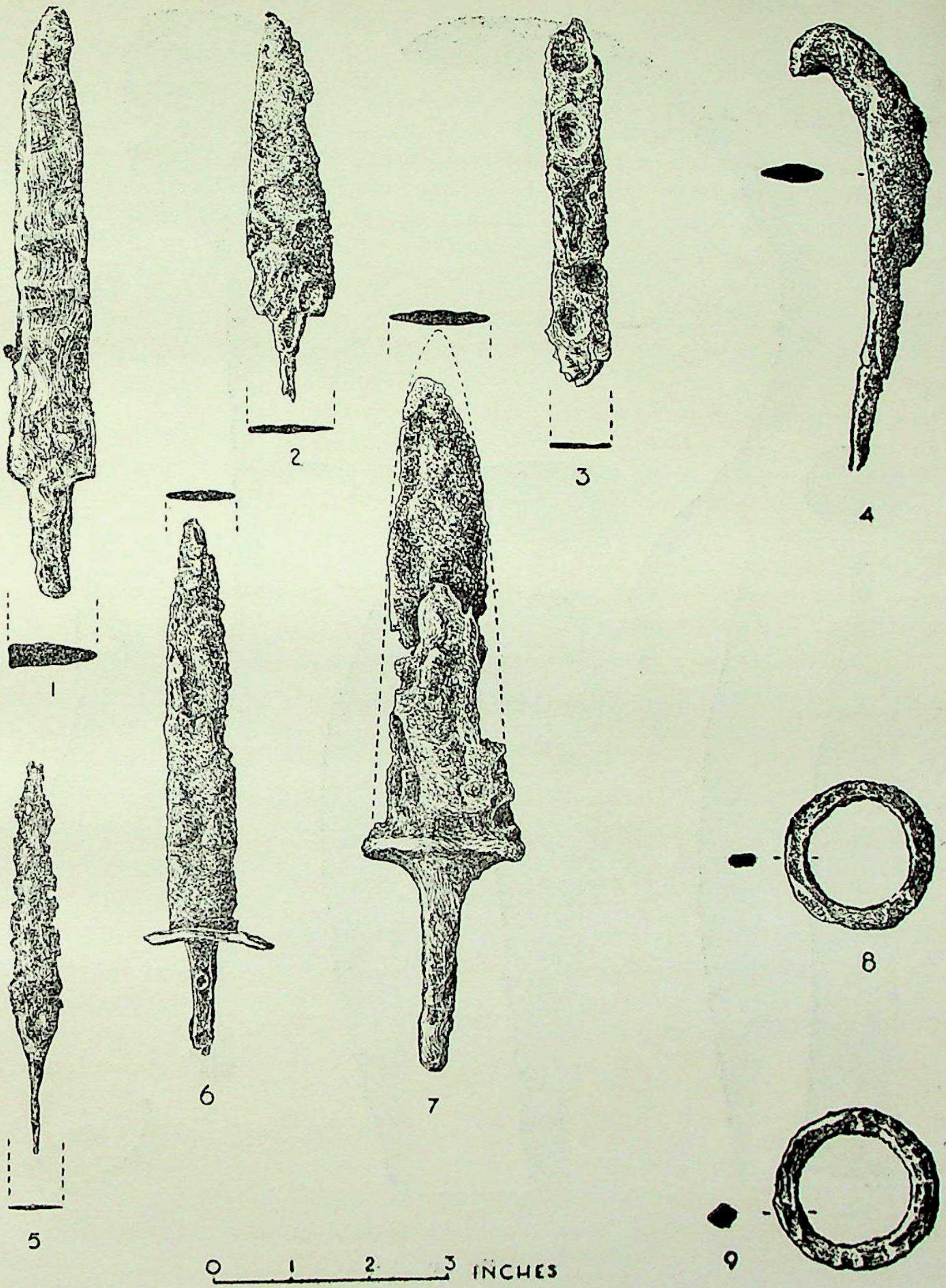

1
2
3
4
5
6
7
8
9
0 1 2 3 INCHES

Fig. 42

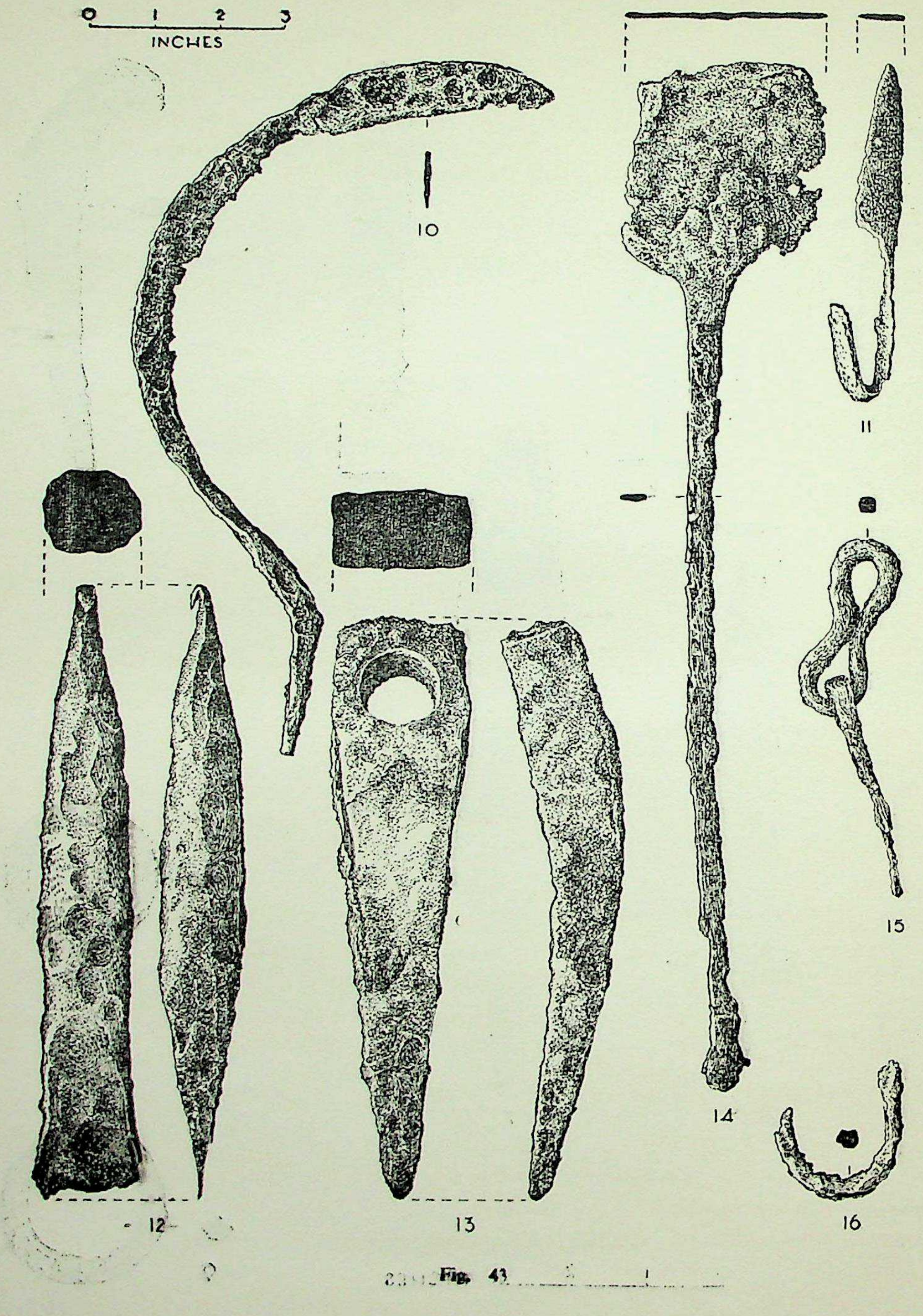

0 1 2 3
INCHES
10
11
12
13
14
15
16

Fig. 43

IX. *Frying Trowel*

1. Frying trowel (tavetho) with a long handle of rectangular cross-section and a broad blade. Length 40.5 cms. Breadth of blade 8 cms. (Fig. 43, 14 and Pl. XXVII B).

X. *Scissors*

1. Broken scissors: One of the blades missing. When complete, the two handles are held together by a bent strip of iron, by pressing which the tool is operated. Length 13.3 cms. Vihara entrance. (Fig. 81, 11 and Pl. XXVII B).

XI. *Door Chain*

1. Door chain of the figure—8 shape, with circular cross-section, attached to a staple. (Fig. 43, 15 and Pl. XXVII B).

XII. *Hook*

1. Broken hook of rectangular cross-section. Thickness: 7 cms. Vihara. Layer (3). (Fig. 43, 16 and Pl. XXVII B).

XIII. *Nails*

(a) Nails with square cross-section.

1. Nails with flat head: These specimens have a flat head projecting all around. The average length is 6 to 7 cms. There are 98 specimens of this sub-type. (Fig. 44 ,23-24 and Pl. XXVII A).

2. Nails with knobbed head: The head in this case takes the shape of a blunt conical knob. The average length of the specimens is about 7 cms., however, there are some more than 20 cms. long. There are 19 objects of this sub-type. (Fig. 44, 27 and Pl. XXVII A).

3. Nails with folded head: The thicker end of the nail is beaten round into a vertical fold. The average length of the specimens is about 12 cms. long. There are 47 objects of this sub-type.

4. Nails with hood-like head: The main feature of this sub-type is the head which projects hood-like towards one side. There are 39 specimens and the average length is 6 cms.

5. Hammer-headed nails: Here, the head looks like a hammer in having projections towards the opposite sides. There are 47 specimens of this sub-type. Average length 6 cms.

6. Nails with featureless head: The heads of these nails are simply thickened ends without any distinguishing feature. There are about 72 specimens of this sub-type. Average length 7 cms.

In addition to the above, there are about 30 fragmentary nails with heads missing.

(b) Nails with circular cross-section:

1. Nails with flat head: Represented by 7 specimens. Average length 5 cms.
2. Nails with knobbed head: Single specimen. Length 10.8 cms.
3. Nails with folded head: One specimen. Length 5.5 cms.

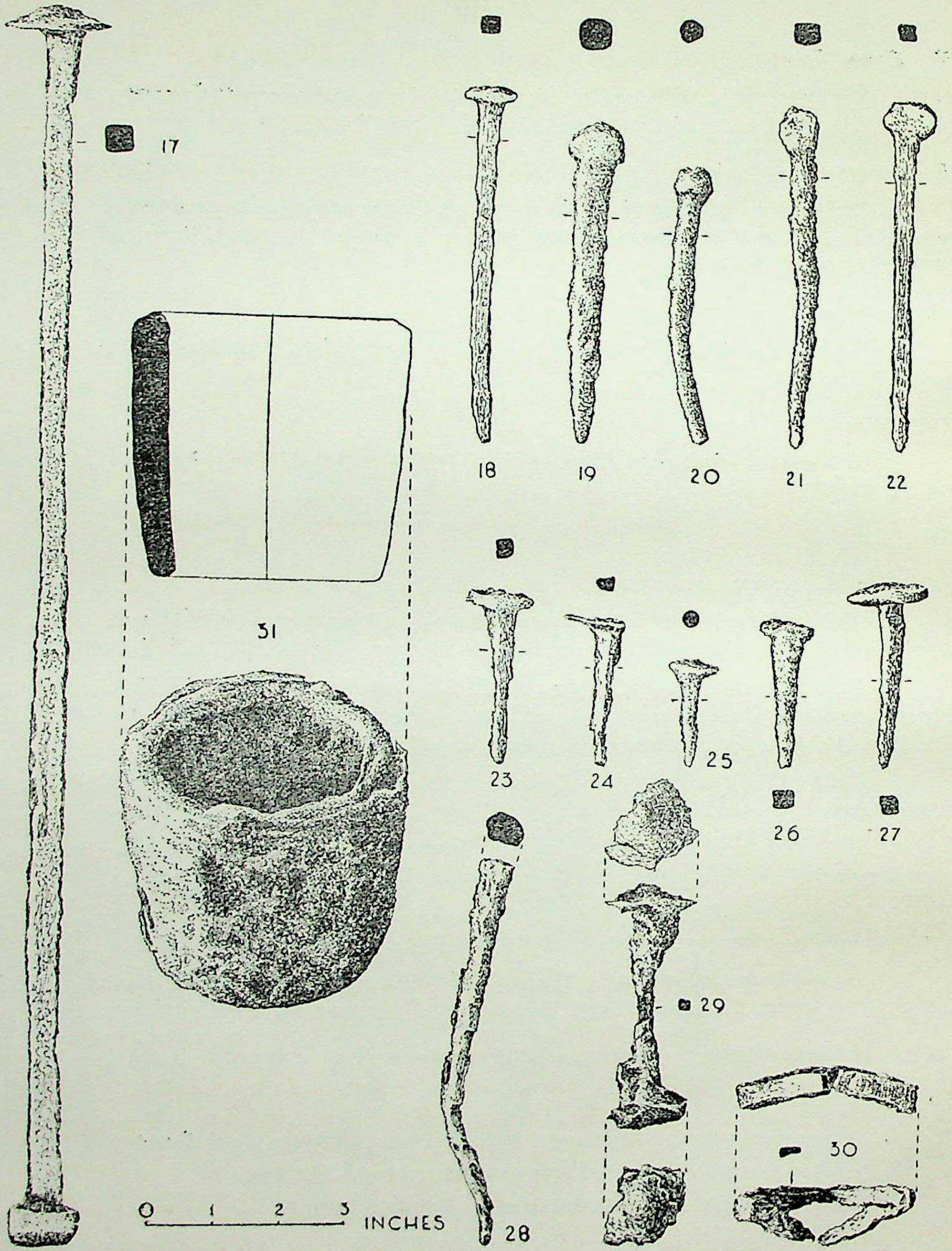

17
18
19
20
21
22
31
23
24
25
26
27
28
29
30
0 1 2 3 INCHES

Fig. 44

4. Nails with featureless head: Three specimens. Average length 5.6 cms. In this type also there are 6 fragmentary specimens.

XIV. *Miscellaneous*

a. 1. Hollow cylindrical object of indeterminate use. Diameter 11.1 cms. Thickness 1.5 cms. Height 9.4 cms. (Fig. 44, 31 and Pl. XXIX D).

b. 2. Rod of square section. 6 cms. long.

3. Similar to the above; 10.2 cms. long.

c. 4. Rod of square section with a square knob-like head at one end, and a rectangular strip rivetted to the other. Use uncertain length 54.7 cms.

5. Similar to the above. Disc corroded. Length 48.4 cms. (Fig. 44, 17 and Pl. XXVII A).

6. Similar. Length 52.8 cms.

7. Similar, Length 47.7 cms.

d. 8. A much rusted piece of iron with rectangular section. Length 25.5 cms.

e. 9. Socket portion of an object. Fragmentary.

f. 10. Clamp of rectangular shape perforated at both the ends. Length 10.3 cms. Breadth in the middle 2.5 cms.

g. 11. Iron wire of rough circular cross-section, bent to a ' S ' shape.

h. 12. Indeterminate object of an iron rod holding together two rusted lumps.

Glass objects from Devnimori (Pl. XXIX A, B, C.)

(1) *Neck of a glass bottle from the pot in the Stupa*

This is the curved portion of the neck of a glass bottle. The glass is of a very fine quality of a batch with copper as the colouring metal. The colour is deep blue and there are distinct traces of the glass being pulled and on one side the neck has been rubbed to a uniform shape. There are no indications of its being separated from the paraison by any sharp instrument by shearing.

The glass is not blown. There is no indication of any cobalt into the batch.

The neck is comparatively thick and is another pointer in this direction.

The largest fragment is about an inch in length and about half an inch in thickness. The thickness of the mouth is about 1/10 of an inch. The mouth when completed was about half an inch in diameter.

The other fragments are too fragmentary to comment.

(2) *Specimen No. 284 from F(4) Vihara*

This is a specimen of flat petal-shaped object of glass which is partly divitrified. This is flint glass rubbed to the required shape and has a rough surface.

(3) *Bowl*

This is a part of the flat sides of a blown bowl of soda-cum-silicate glass of clear transperency. The walls are thick and the edges show that it was cut on a wheel, thus giving a bevelled edge forming perhaps the part of a bowl.

Coins

In all sixty-nine coins are discovered from this site, out of which fifty nine are made of silver; four of silver coated copper, two of copper and four of lead. Most of these coins (59) belong to Kshatrapa dynasty of Ujjain (Circa A.D. 100 to Circa A.D. 400); Three to the Maitrakas of Valabhi (A.D. 480 to A.D. 766), two are of Indo-Sassanian coins (earlier type). The rest are much worn out.

Fifty-four coins were found *in situ* from various stratigraphic positions, five were found from surface. Out of the fifty-nine Kshatrapa coins thirty-nine coins were discovered in a tiny red pot buried in the yellow silt filling assigned to Phase II of the site. This hoard was found just near the entrance of cell No. 1 of the vihara. One of the Maitraka coins was found in the mud-mortar of the final Phase of the repairs of the moulding on Platform II. But the most interesting discovery is that of eight Kshatrapa coins. These coins were found placed in a globular well preserved pot having wide mouth, externally rounded rim and a broad white band on its red globular body. This pot was found deposited in the stupa core itself in the centre of the top of Platform I.[1] A stopped pyramidal structure was built on it, on which the remaining construction of the stupa was carried on. This stopped structure was built on typical pinkish bricks. (16″×10″×2½″) and mud mortar.

From this it will be evident that coins from this excavation were distributed in various strata of phase II and phase III.

---

[1] *Supra*, p. 51.

Kshatrapa coins (Pl. XXX, A, B, C, D)

The Kshatrapa coins are minted in silver alloy. They are roundish in shape and weigh 2.82 gms. to 1.2 gms. Their thickness is also not uniform. While striking edges of some of them have been damaged and hence the round edge is split into cuts and cracks. All these coins were found in tarnished condition and were covered with a thin coat of corrosion.

All these coins are partly worn out or badly struck, hence, legends of only thirty-two could be deciphered. Legends of seven coins were deciphered completely. No doubt, the legends on the remaining coins were partly deciphered but their assignment to various kings was done by the help of geneological table and titles. Many of these coins are marked with punch-marks of dots and stars, crescents, etc., probably, at a later stage. These marks were probably struck by the '*Sharafs*' or bankers of that period.

The main symbol on these coins is the typical 'Chaitya' symbol composed of three arches marked by lines in relief. At the base of this Chaitya symbol are three horizontal wavy lines which are marked in relief. The marks of crescent and a group of dots are placed just above the chaitya. The crescent is marked at left, while the group of dots at right. The crescent represents the 'Chandra' (moon), while the dots in a circle formation represent the 'Divakara' (the Sun). These two symbols are marked to convey that the dynasty would last for a long time 'Yavatchandradivakarau'.

The letters of the legends are typical Brahmi letters of early centuries of Christian Era. They have the typical 'sirorekha' and peculiar loops and curves found on hundred of Kshatrapa coins collected from Western India.

The busts of the kings in profile are facing right. All of them have long pointed nose and prominent curved chin. The eyes are also depicted clearly. The bow-shaped eye-brows and eyes are typical. In some specimens, the pupil of eye is also depicted. Most of the portraits have drooping moustaches with hook-like curves at the end. The forehead is slightly sloping. The peak-cap is drawn upto forehead in such a way that long wavy hair are sticking out from it just above the ear and dangle upto shoulder. The hair are curly at the end. In some coins the collar of the robe is also visible. It is decorated with a band of zigzag lines in relief.

As most of the coins are not struck accurately the legends and the portraits are not in so prominent. But inspite of this drawback the flat outlines of various features are clearly visible and could be identified easily.

The legends are written in Brahmi characters along the border of the coin in clock-wise direction. It is bordered by a circle of dotted line. Due to bad punching most of the numerical symbols, by the side of the busts are either not embossed at all or in some cases only half symbols are printed. Of these the numerical symbols on only four coins could be deciphered completely that of Rudrasena II (Saka 188 A.D. 266) and Vishvasena (Saka 215-216-225 *i.e.* A.D. 293, 294, 303). The details of the coins are given below:

Mahakshatrapa Rudrasena I (Saka 125-142—A D 203-220)

1. Silver, roundish, weight 1.692 gms.

Obverse: Bust of the king facing right.

Reverse: Chaitya with three arches, horizontal line with curved ends at the bast of the Chaitya. Two crescents. Dots.

Legend—*Rajno Mahakshatrapasa Rudrasimhasa Putrasa Rajno Mahakshatrapa—senasa.*

The bust of the king is worn out but still its shape is visible. Only some details of hair are intact. The eye, nose, lips and chin are blurred. Two loops of some numerical symbols are visible but they cannot be deciphered. The legend on the reverse is printed in thin letters in relief. Half of the legend is blurred due to wear but the remaining letters are still legible. The two crescents and the dots are also clear. But the most noteworthy feature of the symbols is a horizontal line curved at two ends. This line is inscribed at the base of the Chaitya symbol in the place of the usual wavy lines.

2 *Mahakshatrapa Rudrasena II*—SAKA 181-192—A.D. 258-270.

Silver, roundish, weight 1.69 gms.

Obverse: Bust of the king facing right.

Reverse: Chaitya with three arches. Crescent, dots.

Legend——ra-maputra—Rajno Mahakshtrapasa Rudra——

The bust of the king is marked with punch marks of dots and a pair of triangles. Date **symbols** are not inscribed as the dye is struck a bit to the left. Details of hair, eye, moustaches and the collar of the robe are visible.

The portrait of the king resembles Rapson's No. 582 (B.M.C. Pl. XV).

As it is a badly struck coin nearly half of the legend is not inscribed at all.

3 *Rudrasena*

Alloy of silver and lead.

Roundish; weight 1.89 gms.

Obverse: Bust of the king facing right.

Reverse: Chaitya with three arches—crescent, dots.

Legend: *Rajna-hakshatrapasa——(Ru) (dra) senasa*

As the bust of the king is not struck accurately, nearly half of the head has not come out, hence there are no numerical symbols of date. Nearly half of the legend is worn out. The horizontal wavy line at the base of the Chaitya is almost straight. Only lower half of the loops of ' RU ' and ' DRA ' are visible to complete the name ' Rudrasena '. ' SE ' and ' NA ' and ' SA ' are very clear.

4. Silver, roundish, weight 1.6 gms.

Obverse: Worn out bust of king facing right.

Reverse: Three arched Chaitya, crescent, dots..

Legend——*Drasenasa*——.

The bust is struck a bit upward so no head dress is visible. Very faint traces of date symbols are there. But they cannot be deciphered. The chaitya crescent, dots, and legend are worn out but still some part of it is at least legible.

5. Silver, roundish, 1.711 gms.

Obverse: Bust of the king.

Reverse: Crescent, Chaitya and dots. The base line of Chaitya almost straight.

Legend: *Rajnah kshatrapasa Viradamaputra—(na) sa.*

The lower portion of face,—chin etc. are not struck at all. The remaining portions of the coin are absolutely flat without any trace of numerical symbols of other letters. On the reverse too, more than half of the coin is worn out. Faint traces of ' Rajnah kshtra—' are visible. Other letters ' pasa virada ' are clear while near ' ma ' the coin is cracked again faint traces of ' putrasa ' are visible. Rest of the legend is completely worn out.

6. Silver, roundish, 1.581 gms.

Obverse: Bust of the king facing right with punch mark of a crescent on the head. Date symbols of 100,80 and 8.

Reverse: Chaitya, faint traces of crescent and dots.

Legend: *Rajnah Kshatrapasa Viradamaputrasa Ragna Mahakshatra—*

The portrait is not engraved perfectly. The numerical symbols though worn out at the top are legible, hence, the symbols of 100,80 and 8 can be deciphered clearly. The legend is worn out near the edges but still faint traces of Rajna Kshatrapasa Viradamaputrasa and clear letters of *Rajna Mahakshatra* are legible.

The most noteworthy point is the horizontal wavy line at the base of the Chaitya which looks like a series of loops due to sharp curves.

7. Silver, round, weight 1.81 gms.

Obverse: Bust of the king facing right and numerical symbols at the back of the head.

Reverse: Chaitya, crescent, dots.

Legend: Rajna Ksha—Rudrasenasa.

A worn out specimen with bust facing right. The numerical signs at the back of the head are worn out near the edge so that only symbol of 80 is identical while lower loops of the digit numbers are visible. It is most probably 188. But the face is quite different from the preceding numbers 593 of B.M.C. The crescent is surmounting the chaitya. Dots are very faint. The legend is worn out, still some of the letters can be deciphered.

Kshatrapa Bhartrudaman (Saka 199 or 200 to 217—A.D. 277-8 to 295)

8. Silver, roundish, weight 2.164 gms.

Obverse: Bust of the king facing right—no trace of date symbols. Only half of the legend is struck due to inaccurate stricking.

9. Silver, roundish, weight 1.23 gms.

Obverse: Bust of the king facing right. Punchmarks of crescent and dots. Symbol of 10 partly legible.

Reverse: Chaitya, crescent and dots. Only a part of the legend.

Legend:——Mahakshatrapasa—Rudrasena putra—.

The bust is punched with five symbols of dots and crescent. The numerical symbols are struck probably only part of 10 is visible. The metal seems to be an alloy of silver and lead.

10. Silver, roundish, weight 1.7 gms.

Obverse: Bust facing right with punch marks of dots and crescent.

Reverse: Symbol of chaitya worn out. Part of legend is also partly worn out.

Legend: *Rajno Mahakshatrapasa Rudrasenaputrasa—*

The bust is blurred. Very faint traces of numerical signs exist. The legend is badly struck so only some part of it can be deciphered.

11. Silver, roundish, weight 1.88 gms.

Obverse: Bust facing right.

Reverse: Worn out legend, chaitya other symbols worn out.

Legend:——*Drasenaputra—*

Though only ' *Drasenaputra* ' can be deciphered, the bust of the coin on obverse is exactly similar to other *Bhartrudaman's* coins, hence, it is assigned to Bhartrudaman.

12. Silver, roundish, weight 1.39 gms.

Obverse: Upper part of the bust of the king.

Reverse: Half worn legend, chaitya, dots, crescent worn out.

Legend: *Rajno Mahakshatrapasa Rudrasa—pu—*

Due to bad striking only upper half of the bust is inscribed. But there is no trace of numerical number. Though the legend is worn out half of it can be deciphered clearly.

13. Lead, roundish, weight 1.2 gms.

Obverse: Very highly worn out bust. Very faint traces of some letters above the head.

Reverse: Highly worn out. No symbols visible. Only faint traces of legend.

Legend: *Rajna Mahakshatrapa—trudaman—*

The worn out letter above the bust seems to be some Greek-letter.

14. Silver, roundish, weight 1.75 gms.

Obverse: Bust of the king facing right with marks of letter.

Reverse: Chaitya, crescent, dots.

Legend:—*Rudrasenaputrasa—gno Mahakshatrapa—*

This is an important coin as it is depicting *Bhartrudaman* as a *Mahakshatrapa*. All other coins of Bhartrudaman from this excavation are having 'Kshatrapa' title. But unfortunately no numerical signs are visible. Only some part of the legend is clear. The symbols are clearly visible.

15. Silver, roundish, weight 1.745 gms.

Due to inaccuracy of striking the most of the fore part of face is not printed at all, hence, only part of nose, eye, earlobe, some hair and collar are visible. The numerical symbols near the back of head are not completely pointed so they also cannot be deciphered. The legend and the symbols on the reverse are inscribed in broad flat lines in low relief. The upper parts of the letters are cut off still almost whole legend could be deciphered. The crescent and the dots are clear. The wavy line at the base of the chaitya symbol is very roughly marked.

16. Silver, roundish, weight 1.767 gms.

Obverse: Bust of the king facing right.

Reverse: Details of symbols worn out.

Legend: *—pasa Rudrasenaputrasa Ra—*

This is a much worn out coin. The bust in low relief is also worn out. But still the outlines of various features are visible. The tip of nose and chin are not struck at all as the dye is struck inaccurately. Faint details of eye, earlobes and hair are visible. Some outline of cap is also visible. Due to inaccuracy of minting only ten letters are inscribed on the coins. Other letters are completely missing. No traces of chaitya symbol or any other symbols are visible.

17. Silver, roundish, weight 1.760 gms.

Obverse: Bust of the king facing right.

Reverse: Crescent, dots, chaitya.

Legend: *Rajnah Kshatra—Rudrasenaputrasa—*

A worn out coin. The lower portion of bust is worn out. The punchmarks of cresent, and dots are clearly visible. Details of eye, hair and ear are visible. Tip of nose, chin and cheek are worn out. Almost half of the legend is blurred but the remaining letters in low relief are visible. The crescent, the dots and chaitya symbol with a single wavy line at its base are also visible.

Kshatrapa *Vishvasena*—Son of *Bhartrudaman* (Saka 216-217-227 A.D. 294-5-305).

18. Silver, roundish, weight 1.69 gms.

Obverse: Bust of the king marked with punchmarks of crescent, dots, part of numerical symbols.

Reverse: Chaitya, double crescent dots.

Legend: *Rajno Kshatrapasa Vishvasenasa—*

The bust is inscribed in high relief but the details are worn out. Part of collar design and three curls of hair are visible. Two of the numerical signs can be deciphered—200 and 20. The unit sign is completely worn out.

Most of the legend is fairly clear. But the worth noting feature of this coin is the double crescent one at the left of the chaitya and the other surmounting it.

19. Silver, roundish, weight 1.34 gms.

Obverse: Bust of the king facing right, punchmarks of circle, crescent and dots, numerical signs.

Reverse: Legend, chaitya, double crescent, dots.

Legend: *Rajno Mahakshatrapasa—svasenasa—*

The bust though in high relief is worn out. No details of eye and moustaches could be seen. The lips, hair and collar of the robe are clearly visible. The numerical signs of 200 and 10 are clear. The upper half of the unit sign is worn out, only the lower loop curved to the left is visible so it is either five or six. The chaitya, double crescents and dots are clearly visible.

20. Roundish, Silver, weight 1.85 gms.

Obverse: Bust of the king facing right, a punch mark of small circle, numerical signs, small circle, Greek letters.

Reverse: Chaitya, crescent and dots worn out.

Legend: *Rajna Ma-ksha-kshatrapasa-Vishvasenasa—*

The bust though in high relief is devoid of details. The numerical signs of 200, and 10 are almost identical while the unit number is partly worn and is like that of the coin no. 15. It is either five or six. Fourl etters of the Greek legend are clear. The symbols at the reverse are worn out except the horizontal wavy line at the base of the chaitya. Part of legend is fairly clear. Particularly the vowel sign of 'I' in 'Vi' is noteworthy.

21. Silver, circular, weight 2.82 gms.

Obverse: Bust of the king facing right, numerical signs.

Reverse: Chaitya, double crescent and dots.

Legend: *Rajno Mahakshatrapasa Bhartru—Rajna Kshatrapasa Vishvasenasa.*

The bust is in high relief but devoid of details. Only the hair and decorated robe-collar are visible. The numerical signs of 200,10 and 5 are visible. Chaitya crescent and dots are also clear.

22. Silver, circular, weight 2.4 gms.

Obverse: Bust of the king, part of numerical signs.

Reverse: Chaitya symbol and dots worn out, double crescent is visible.

Legend: *Rajno Mahakshatrapasa—trudamaputrasa Ragno Kshatra—Vashvasanasa—*

The bust is in high relief but devoid of details except hair and robe-collar. Numerical signs of 200, 20 are partially visible. The legend is fairly clear, the symbols are worn out.

23. Silver, circular, weight 1.69 gms.

Obverse: Blurred bust, no numerical signs.

Reverse: Chaitya, crescent and legend.

Legend: *Rajna Mahakshatrapasa Bhartrudamaputra—*

The bust is in high relief. No numerical signs are visible. Chaitya, double crescents and dots are blurred but the legend is fairly clear.

24. Silver, circular, weight 1.66 gms.

Obverse: Blurred bust, punchmarks of crescent and dots.

Reverse: Chaitya, other symbols worn out.

Legend: *Trapasa Bha* (*tru*) (*da*) *maputrasa—*

The bust facing right is blurred and marked with crescents and dots. Only some portion of the legend is visible.

25. Silver, circular, weight 2.17 gms.

Obverse: Bust, numerical signs.

Reverse: Chaitya, crescent, dots, legend.

——*Rajna Mahakshatrapasa Bhartrudamaputrasa Ragnya—*

The bust of this specimen differs slightly from the preceding ones. It has a pointed nose while the others have slightly blunt nose. The numerical signs of 20 and 5 are visible so this coin is dated 225.

The symbols and legend at the reverse are fairly clear.

26. Silver, circular, weight 1.78 gms.

Obverse: Bust in high relief, no date.

Reverse: Symbols worn out, part of legend visible.

Though the bust is in high relief no details are visible. The punch marks of dots and crescent are visible. No trace of numerical symbols. The symbols on the reverse are completely worn out.

27. Silver, circular, weight 1.57 gms.

Obverse: Bust, no trace of numerical symbols.

Reverse: Chaitya, crescent and legend—

——*Putrasa Rajnya Kshatrapasa Vishva*—-

This bust though in relief is devoid of details. No trace of numerical signs. The chaitya and crescent are clear but no trace of dots.

Kshatrapa Vishvasena. (Saka 216-217 to 227 A.D. 294-5 to 305).

28. Silver, roundish, weight 1.843 gms.

Obverse: Bust of king facing right.

Reverse: Symbols worn out, only faint shape of chaitya is visible.

Legend: *Rajna Ksha—putrasa Ragnyo Kshatrapasa Vishvasenas*—

The bust is printed in prominent relief. The nose, eye, lips, chin, ear and hair are visible. The decorated collar is also visible. Only two third of the legend is struck on the reverse. The letters are in low clear relief. The symbols of crescent and dots are worn out but the shape of the chaitya symbol could still be marked.

29. Silver, roundish, weight 1.81 gms.

Obverse: Very clearly depicted bust of king in half relief.

Reverse: Chaitya symbol, double crescent, dots.

The portrait is represented in very prominent relief. The eye with its eye-brow, nose, lips, chin, cheek, ear, hair and cap are marked clearly. Some traces of decoration on the collar are also visible. No trace of numerical symbol is visible. The almost complete legend on the reverse is inscribed in clear lines in low broad relief. The symbol of double crescent looks like short wavy lines. The dots are also clear. The wavy line at the base of the Chaitya symbol is marked roughly.

Kshatrapa Rudrasimha—son of *Swami Jivadaman.*

(Saka 227-33 A.D. 305-313).

30. Silver, circular, weight 1.71 gms.

Obverse: Bust, no trace of numerical signs.

Reverse: The peculiar chaitya symbol of one arch, crescent and dots.

——*Svami Jvadamaputra*—-*Rajnya Kshatrapasa Rudrashasa*—

The slightly blurred bust is marked with punch marks of dots. Date symbols are not marked. The legend is inscribed in typical angular letters. The chaitya symbol is peculiar. It seems there is some mistake in the eye. Only one arch, oblique hooked line and slightly wavy line is depicted at the base.

31. Silver, circular, weight 1.74 gms.

Obverse: Bust marked with punch marks.

Reverse: Chaitya, crescent, dots.

—Svami Jivadamaputrasa Rajnya Ksha—pasa Rudrasanasa—

The bust is blurred and marked with punch marks. No trace of numerical sign. The symbols and legend at the reverse are quite clear.

32. Silver, circular, weight 1.88 gms.

Obverse: Bust, some numerical sign, bust punched with dots etc.

Reverse: Chaitya, double crescent, dots.

Legend: *Svama Javadamaputrasa Ragnya Kshatrapasa Rudrasimhasa.*

The bust is worn out. Still eye, lips and parts of hair locks are visible. Some loops of the numerical symbols are visible. 200 can be deciphered. Symbols of decimal and unit are too blurred. The chaitya, double crescent and sun are clear. The legend is also complete. This is the only coin of the whole lot where legend is complete.

33. Silver, circular, weight 2.34 gms.

Obverse: Clear bust in high relief with punch marks of dots and crescent. No trace of numerical symbols.

Traces of some letters to the right.

Reverse: Chaitya, crescent, sun, almost complete legend.

Legend: *Svam(i) Jivadama putrasa Rajna Kshatrapasa Rudrasahasa.*

Almost undeteriorated specimen. The bust in high relief is having all details of nose, nostril, eye, chin, jaw, hair and robe-collar. But as the dye is not struck correctly no symbols of numerical signs are inscribed. The chaitya, double crescent, and sun are clear. The horizontal wavy line at the base of the chaitya is joined with the 'RU' so that there seems to be a long horizontal line. Letters are angular.

34. Silver, circular, weight 2.5 gms.

Obverse: Bust in high relief, lower portion cut off.

Some portion of undeciphered Greek legend.

Reverse: Chaitya, crescent, sun. Almost complete legend.

Svami Jivadamaputrasa Rajnyah Kshatrapasa Rudrasim—

The bust in high relief is worn out. Its lower portion is not inscribed. Some part of Greek legend is inscribed along the edge. The chaitya is typical. Its lower semi circles are not attached to one another. The crescent and sun are clear.

Kshatrapa Yashodaman IInd—son of *Rudrasimha IInd*—(Saka 239 to 254—A.D. 317 to 332)

35. Silver, circular, weight 1.85 gms.

Obverse: Worn out bust with punch marks or crescent very faint traces of numerical signs at the back of the bust.

Reverse: Almost complete legend, chaitya, crescent and sun are clear.

—Rajnya Kshatrapasa Rudrasanaputrasa Rajnya Kshatrapasa—Yashodamana—

The bust though in bold relief is worn out. One punch mark of crescent and a dot are inscribed on the bust. The numerical symbols are all worn out and hence are not legible. The legend on the reverse is clearly legible. The chaitya and sun are also clear but the crescent is not accurate.

Mahakshatrapa Svami Rudrasena IIIrd—son of *Mahakshatrapa Svami Rudradaman IInd* (Saka 270-300 A.D. 348-378).

36. Silver, circular, weight 1.92 gms.

Obverse: Bust, Greek legend.

Reverse: Chaitya with a finial like vertical stroke surmounting it, double moon, sun. The legend is worn out along the edge.

Legend: *Rajnya Mahakshatrapasa Svama Rudradamaputrasa Rajnya Mahakshatrapasa Rudrasanasa–*

The upper part of the bust is not inscribed so no head-dress is visible. The face is very big and covers nearly three quarters of the space. It does not resemble those illustrated by Rapson. There is some legend in Greek but it is also partly worn out. The chaitya is typical. It is surmounted by a vertical stroke put probably to represent a finial. Double crescent and sun are also clear. But most interesting feature of this coin is the representation of three crescents instead of horizontal wavy line at the base of the chaitya.

37. Silver, circular, 1.61 gms.

Obverse: Blurred bust and symbols of numerical signs.

Reverse: Chaitya, crescent and sun.

Legend: *Rajnya Mahakshatrapasa Svami Rudradamaputrasa rajnya Kshatrapa-sa—Rudrasanasa—*

The bust is highly corroded, hence, no details of face are visible. The reverse also though deteriorated is clear. The chaitya is very small. The crescents look like dots. The legend is almost complete.

38 Silver, circular, weight 1.81 gms.

Obverse: Corroded bust, some traces of numerical signs.

Reverse: Chaitya almost flat, crescents and Sun are also in very tiny dots.

—Rajnya Mahakshatrapasa Svama Rudradama putra (sa) Rajnya—Svami Rudrasanasa—

The remaining two coins are much worn out hence, their legends could not be deciphered completely or even partially so that they can be assigned to a particular king.

39 Silver, roundish, weight 19.36 gms.

Obverse: Bust of king facing right.

Reverse: Crescent, chaitya.

Legend: *Rudrasa—trasa—Rajnya Mahakshatra—*

The face is much worn out hence, only its outline is visible. Details of features are not so clear. The legend on the reverse is marked in low bold letters. The symbol of dots is completely missing because the dye is struck a bit sideward. The crescent is roughly marked. The chaitya symbol and the wavy line at its base are also not so accurate.

40. Silver, roundish, weight 1.437 gms.

Obverse: Portrait of king facing right.

Reverse: Chaitya, crescent, dots.

Legend: *Rajnyo Mahakshatrapa—*

This is a thin, much worn out coin. Due to the pressure of the striking the portrait in relief is printed in a concavity. It is further marked with a number of punch marks of dots, circles, crescents and specks. Only rough outline of face, eye, hair and some parts of the cap are visible. Due to the concavity of the obverse side the reverse side has become convex and hence is much worn out. Only few letters could be deciphered. The symbols of crescent, dots and the chaitya are also blurred but could be seen easily.

The coins from No. 41 to 57 are much worn out. On some of them, only parts of some letters like "Kshatrapa" etc. are visible so they cannot be assigned to any ruler. But the typical busts of kings with their peculiar cap, hair, collar and facial features, as well as the chaitya and other symbols on the reverse indicate that these coins can be assigned to the Kshatrapa dynasty only.

Maitraka Coins

In all, three Maitraka coins have been discovered. Out of which two are of silver alloy having silver and lead. The third coin is a silver plated copper coin. The two silver coins are best preserved specimens. There are no signs of use marked on them. The letters as well as symbols and the bust of the king are in sharp, distinct relief. But, unfortunately the legend of only one could be deciphered. The second specimen, though in excellent condition, could not be deciphered completely. Only some of its letters are deciphered. The reading of the legend of such coins is a matter of controversy among scholars.

On the obverse of these coins is represented the head of the king in profile. Letters or decoration except this head are marked on this side. The profile figure represents a mature man having prominent impressive features which convey authority and dignity. The pointed nose is slightly hooked at the tip. The pointed tip and even the curve of the nostril is clearly visible. Slightly sloping forehead is typical. The bow shaped eyebrow is also marked with a line in relief. No more details of eye are given, except its outline. The lips are depicted by two dot-like markings. Though the dots are very tiny, they are put at the exact place and hence convey the shape of the lips perfectly. The chin is marked by a prominent relief. The drooping moustaches are hooked at the end. But the most attractive feature of the head is the extraordinary jaw and cheek marked very prominently. The ear is marked by a hook like line which depicts upper part of ear, while the earlobe is represented by a small thin loop. The peak cap is also clearly visible, from under which are sticking out the wavy hair which form a prominent curl around the ear and then drop upto the line of neck. No other symbols, legend or other markings are represented on this side.

The reverse of these coins is marked by a trident and the legend. The legend is in Brahmi script with small *sirorekhas* and slightly hooked letters at bottom end. This legend is inscribed in a circle and can be read in a clockwise direction. The outer line of the legend is marked by a circle formed by dotted line. The trident has three blades. The central one is straight and slightly tapering at the end. It is longer than the flanking blades. The flanking blades are shorter than the central one and are pointed at the end. They are slightly curved near their tips and are joined to the central rod by curves. The joining part of the three blades is marked by a circular dot.

The shaft of the trident ends in a blunt point. One of the tridents has an axe (*Parashu*) attached at this end. No other marking are there.

58. Sri Sarvvabhattaraka (A.D. 380 to 405)

Alloy of silver, roundish, weight 1.346 gms.

Obverse: Bust of the king facing right.

Reverse: Trident, below which a *Parashu* is attached on the shaft.

59. Alloy of silver, roundish, weight 1.463 gms.

Obverse: Bust of the King facing right.

Reverse: Trident.

Legend: Though the letters are very clearly marked they could not be deciphered accurately.

60. Silver-coated copper, roundish, weight 1.290 gms.

Obverse: The bust is completely worn out only three embossed wavy lines representing the hair can clearly be identified.

Reverse: Trident and legend. The border of this coin is broken so the letters cannot be deciphered.

The two Indo-Sassanian coins are broken. But inspite of such condition the beautifully adorned head on obverse and the altar and stylized figures on reverse could easily be recognised (Pl. XXX H).

It should be noted here that such coins were found from Sind[1] also. The Gadhaiyas which are supposed to have been derived from these coins are found in profusion from various sites of Gujarat.

Bricks used at Devnimori

The monuments at Devnimori are all constructed mostly of bricks, the exception being the compound wall and the flouring of the shrine-room of the vihara.

---

[1] A.S.I., *Antiquities of Sind*, p. 6.

The bricks that are used in the construction of these monuments are of many sizes, and range from small square brick to very large bricks of jambs and arches. The general shape of these bricks is the rectangular one but the other varieties are:

(1) Chamfered. Only one side of these bricks is chamfered. It is generally used for the moudlings. Two varieties are seen in this form. One has only the narrow side chamfered, while the other has upper and narrow side chamfered.

(2) Cut at right angle. These bricks have a right angled cut on one side of it. They are specially used for the *antarala*.

(3) Small square bricks. These are quite small compared to the average size of the bricks. Their specific position cannot be determined as none of it was found *in situ.*, but the traditions of square decorations suggest that they were probably used on the moulding.

(4) Long dentils. These bricks are very long.

(5) Chaitya-arch-type. These bricks are in a number of forms. One of them is a semi triangular with its hypotenuses cut in steps.

(6) The other variety is semi-circular. It is like No. 5 but on hypotenuse side, it shows an arch of a circle, with a small projection on either side.

(7) Long jambs. These are large and massive bricks of different sizes. Some of them has the base and upper jamb as different pieces. The varieties in this type show one side of the brick cut into a slant for joining it to the next one.

(8) Arch. Large arches were formed by the use of bricks with two sides curved, and other to slant, to fit the general curve of the arch.

(9) The bases. Brick bases of different size show mostly uniform decoration.

(10) Shafts. They are more like the jambs.

(11) Capitals. They are the large rectangular blocks with one or two sides decorated.

(12) Indented bricks one side shows triangular indentation used for the decoration of the *Vyakhyaua Pith* and Vihara 2.

The sizes of the bricks are tabulated below:

Types 1 and 2	L.	B.	Th.
	19"	13"	3"
	17"	11"	2½"–3"
	16"	11"	2½"
	15½"	10½"	2½"–3"
	15"	10"	2½"–3"
	13"	9"	2½"
Type 3	5½"–6"	5½"–6"	3½"–4½"
Type 4	18"	6"	5"–5½"

	Base	Height	Th.
Type 5	3′–2″	1′–7″	4″-4½″
Type 6	2′–6″	1′–6″	4″
	L.	B.	Th.
Type 7	16″	10½″	9¾″
	15″	14″	9¾″

Type 8 is curved and shows different diameter and lengths. But their thickness is about 6 ″

	B.	H.	T.
Type 9	14″	7¼″–7½″	6½″
	L.	B.	T.
Type 10	15″	7½″	4¼″
	B.	H.	T
Type 11	14″	7″	10½″
	13″	6″	11″
	L.	B.	T
Type 12	16½″–17″	10½″	2½″

Caskets

From the Mahastupa two caskets were obtained. Both of them were laid in earthen pots and the pot was well placed on the brick or earth pit.

Casket I (Fig. 45 and Pl. XXXI A)

The lowest casket is of schist. It is a cylindrical casket 12 cms. high and 1.8 cms. thick at the top. It is a highly unfinished casket showing the chisel marks on the interior and exterior. Its lid was better finished. This casket contained only ashes. The black clay that covered it had also partly filled it. The lid of this casket is fragmentary.

Casket II (Fig. 46 and Pl. XXXI B).

The other casket is more interesting it is made in three pieces (1) knob of the lid (2) the lid (3) the body.

The knob is turned round at the top (0.65″ height 1.1″ d) but the lower portion is square (0.5″).

This square projection correctly fits in the hole perforated in the centre of the lid. This hole might have served as the pivot for turning this lid on the lathe.

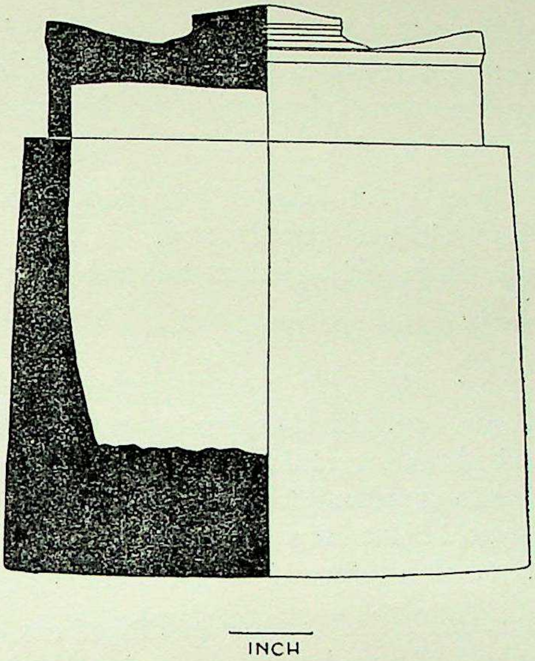


Fig. 45

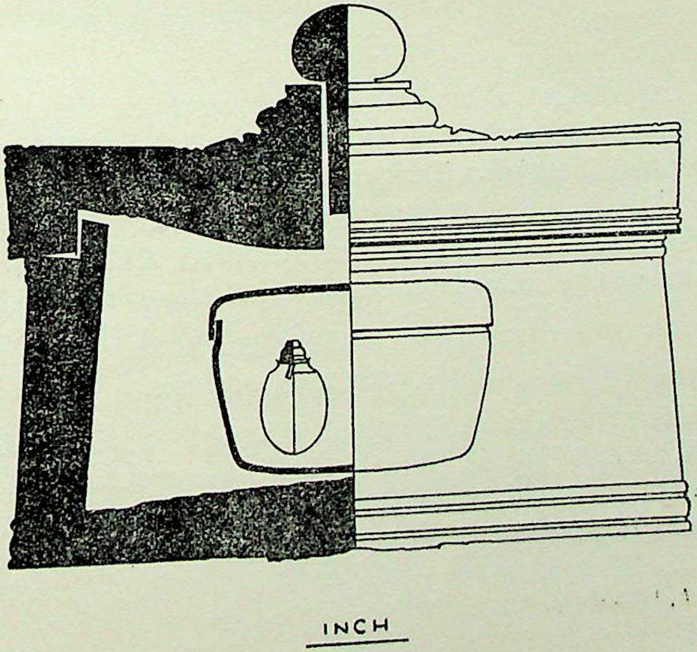


Fig. 45

The lid (6.7″ h. 1.05″ th. 0.7″) is circular and is made to fit on the body of the casket. The body is also turned on lathe. It was attached to the lathe at the base. On its centre was a small pivot which was broken after the casket was made.

The body (6.8″ base, h. 2.9″ ledge .4″) is also cylindrical. On the rim there is a ledge on which the lid was correctly fitted.
This casket is inscribed. In it gold and silver foil and other material was placed (Pl. XXXII and XXXIII).

Copper box (Pl. XXXI C).

Inside this casket was a cylindrical copper box with flat top and bottom. Its slip on lid fitted on the body having a ledge on the rim. In it silk bags, gold bottle and some organic material was placed (Pl. XXXI D). Gold bottle (XXXI E). The small amphora-like gold bottle has a sagger base, cylindrical body and narrow neck. Its lid is screwtype. It was found lying loose in the copper box.

The shape of this casket is similar to the one found at Gaz Dheri in NWFP. The practice of placing both of them in earthen vessel and the similarity of packing used, to keep them in place is very striking.[1]

Inscriptions

From the excavations the inscribed objects such as casket, seals, coins, were obtained. Out of them the coins are separately dealt with. The other inscribed objects are a seal and Casket II. They constitute the three inscriptions which are deciphered, two of these inscriptions are engraved on Casket II (Pl. XXXIV, XXXV and XXXVI A) and one is engraved on a steatite seal (XXXVI B). Faint traces of writings are seen on terracotta plaquze but the yare too worn out to be deciphered.

All these inscriptions are engraved in the Brahmi Script that was known in Western India during the 4th and the succeeding centuries.

The inscriptions on Casket II suggest that both cursive and monumental forms were existing side by side. For inscribing the monumental writings, first the inscription was traced on the stone in small cursive letters and then it was carved in the monumental form. The soft stone made this mode practicable.

---

[1] *A.R., A.S.I.*, 1902-03, p. 175.

A schist plate shows scribbling of letters. This evidence suggests that the monks were probably taught writing at Devnimori, and this fragment is probably a slate used either by the teacher or the taught.

Text of the Inscription

Casket II Inscription on the body

नमस्सर्वज्ञाय ॥ ज्ञानानुकम्पाकारुण्यप्रभावनिधये नमः ॥ सम्यक्संबुद्ध अ[सू]र्य्याग्र परवादितमोनुदे ॥ सप्तविंशत्यधिके कथिक नृपाणां समागतेऽब्दशते

भद्रपदपंचमदिने नृपतेाश्रीरुद्रसेनेच कृतमवनिकेतुभूतम्महाविहाराश्रये महास्तूपं सत्वानेकानुग्रह निरताभ्यां शाक्यभिक्षुभ्यां

साध्वग्निवर्म्म नाम्ना सुदर्शनेनच विमुक्तरंघेण काम्मान्तिकेच पाशान्तिकपल्ली शाक्यभिक्षुकावत्र दशबलशरीरनिलयश्शुभशैलमय स्वयं वराहेण

कुट्टिमकतोकृतोयं समुद्गकस्सेनपुत्रेण ॥ महासेनभिक्षुरस्यच कारयिता विश्रुतः समुद्गकस्य

सुगतप्रसादकामोवृद्धयर्त्थंनधर्म्मसंङ्घाभ्यां ॥

Casket II Inscription on the lid.

LINE-1 एवम्मे सुभं एक समये भगवा सावत्थिय विहरती जूतवणे अणाथ पिंडिकस्स आरामे तत्रहु भगवा भिक्खु आमन्त्रित्ता भिक्खुवेति भन्तेति ।

LINE-2 ते भिक्षु भगवतो पुच्चं संसु भगवा एतदवोच ॥ पदीच्च समूपादं वो भिक्खवे दे से संत साधु सुसूण धमण सिकुरोध भासिस्सामि सुहव्वो एवं भन्तेति ते भिक्खु भगवो

LINE-3 पुच्च सुसू भगवा एत[द]वोच कतमो च भिक्खवे पदिच्च समुपादो ॥ सुविज्जा पुच्चया संक्खारा ॥ संक्खारा पुच्चयं विञाणं ॥ विञाणो पुच्चयं नामरुप ॥ नामरुप पुच्चया च्छीलायतनं ॥ च्छीलायतनं पुच्चया फस्सो ॥
फ

RIM SIDE फस्सो पुच्चया वेतणो ॥ वेतणो पुच्चया तन्हा ॥ तन्हा पुच्चया उवादाण ॥
फ

LINE-4 उवादाण पुच्चया भवो ॥ भव पुच्चया ज्जाति ॥ ज्जाति पुच्चया जरामरण
सोकु परिदेव दुक्खदोमणस्सरपायासा संभन्ति एमेति स्सकेवलस्स
दुक्ख खंधस्स समुदयो होति ॥

[0] [0]
RIM UNDER अज्ञानिरोधा सक्खार निरोधो ॥ सक्खार निरोधा विञाण निरोधो ॥
SIDE विञाण निरोधा नामरुप निरोधो ॥ नामरुप निरोधा षलायतना
LINE-5 निरोधो ॥ षलायतन निरोधा फस्सनिरोधो । फस्सनिरोधा वेदना
फ फ

निरोधो ॥

INSIDE THE वेदना निरोधा तन्हा निरोधो ॥ तन्हा निरोधा उपादाग निरोधो ॥
LID-LINE-6 उपादाण निरोधा भव निरोधो ॥ भव निरोधा जाति निरोधो जाति
निरोधा
LINE-7 ज्जरा मरण शोक परिदेव दुख्खदोमणस्सरपायसो निरुध्यन्ति ॥ एवै-
तस्सकेवलस्स दुःखखंधस्स निरोधो होति ॥ अथ दुव्वुति
LINE-8 भिक्खवे पदिच्चसमुप्पादो ॥ इति द्वो भिक्खवे देतअवोचम्ह । पदिच-
समुप्पादव्वोभिक्खवे दोशे संत साधु अंसु
LINE-9 णा धमणोसिरोभासि स्सामन्तु हम्मेतियेतअवोचम्ह इमन्त पदिचा-
अवंचम्ह ॥

STEATITE SEAL

ये धम्माहितुप्र
भवाहेतु तेषां तथा
गतो आवहा तेषां च
यो निरोध एवं वादी
महाश्रमणः

Chapter VI

DECORATIVE MOTIFS

The architectural creations of man are usually ornamented with various architectural features—functional or purely decorative—as well as additional natural or artificial decorative elements borrowed, adopted and evolved according to trend of that particular culture.

The Buddhists who erected the grandeur in the Mahastupa, embellished this magnificent brick structure with various terracotta decorations. Some parts of the viharas were also decorated with simple saw-tooth decorations.

This portion of the report deals with the artistic aspects of the decoration. For the sake of convenience and clear understanding, it is divided into three parts. The first part deals with the integrated study of basic elements of decoration, where every motif—either natural or artificial—, and its varied application in this art is studied in details. Second part reveals the technique of manufacture, wherein the application of these motifs is also described. The last part deals with detailed descriptions of all art pieces. Every piece is further studied analytically in tabular form where details of form, function and position of all decorative motifs are classified.

Basic Elements and Motifs of Decoration

Architecture creates opportunity for other visual arts like sculpture and paintings. The Buddhists adorned edifices like Mahastupa. At Devnimori they have followed the tradition inherited from their predecessors of Gandhara art, which in turn had borrowed, adopted and Indianized the Greco-Roman art of the ancient occident.[1]

The basic elements which comprise the bulk of various motifs of Devnimori can be classified into two main divisions: natural and artificial. The natural motifs are borrowed or derived from the organic world of plants as well as animals and human form. Under the head of artificial motifs can be listed the geometric designs produced by artificial means from imagination, and forms derived from human artifacts.

---

[1] Marshall, Sir John, *Buddhist Art of Gandhara.*

Natural Motifs

Natural motifs can be divided into three classes:

(1) Floral (2) Faunal (3) Human.

Floral

In nearly every style many motifs are derived from the plant world. To produce various patterns, leaves and flowers either singly or combined have been adopted in almost all schools of art. For this purpose the artists have selected a few leaves and from their shape have created basic ornaments according to rules of rhythm and symmetry.

At Devnimori we have following leaves and flowers:

A. Acanthus. B. Laurel. C. Olive. D. Lotus.

A. Acanthus: (*Acanthus Mollis:* Fig. 47, 1)

Of all the motifs borrowed from nature acanthus is the most common in Greco-Roman and its allied arts. Its frequent and varied application in Corinthian Order in Greek and Roman art is well known[1]. Its typical serrated form which provides a wide range of ornamental possibilities seems to be the main reason for its popularity. Vitruvius the famous Greek author on architecture states that Callimachus (B.C. 437) discovered and developed the artistic composition of this leaf depicted on the inverted bell-shaped capital of Corinthian Order[2]. The artistic compositions of Greek art were adopted by Romans (Fig. 47, 2, 3.) who spread them in their empire in Syria from where the Indo-Corinthian style seems to have taken roots. It is well known that Kanishka invited the artists even from Asia minor.[3]

At Devnimori the acanthus leaf is represented in various forms according to respective function and position in decorative scheme. But the spoon-shaped rounded broad tips and vigorous curves are the chief characteristics of this plant that is utilized by the artists in various ways. The application of this floral motif can be divided into four types:

---

[1] Gloag, John, *Guide to Western Architecture*, p. 47.

[2] Morgan, M. H., *Vitruvius's Ten Books on Architecture*, Book IV, Chap. I.

[3] Rawlinson, H. G., *India and the Western World*, pp. 164–5.

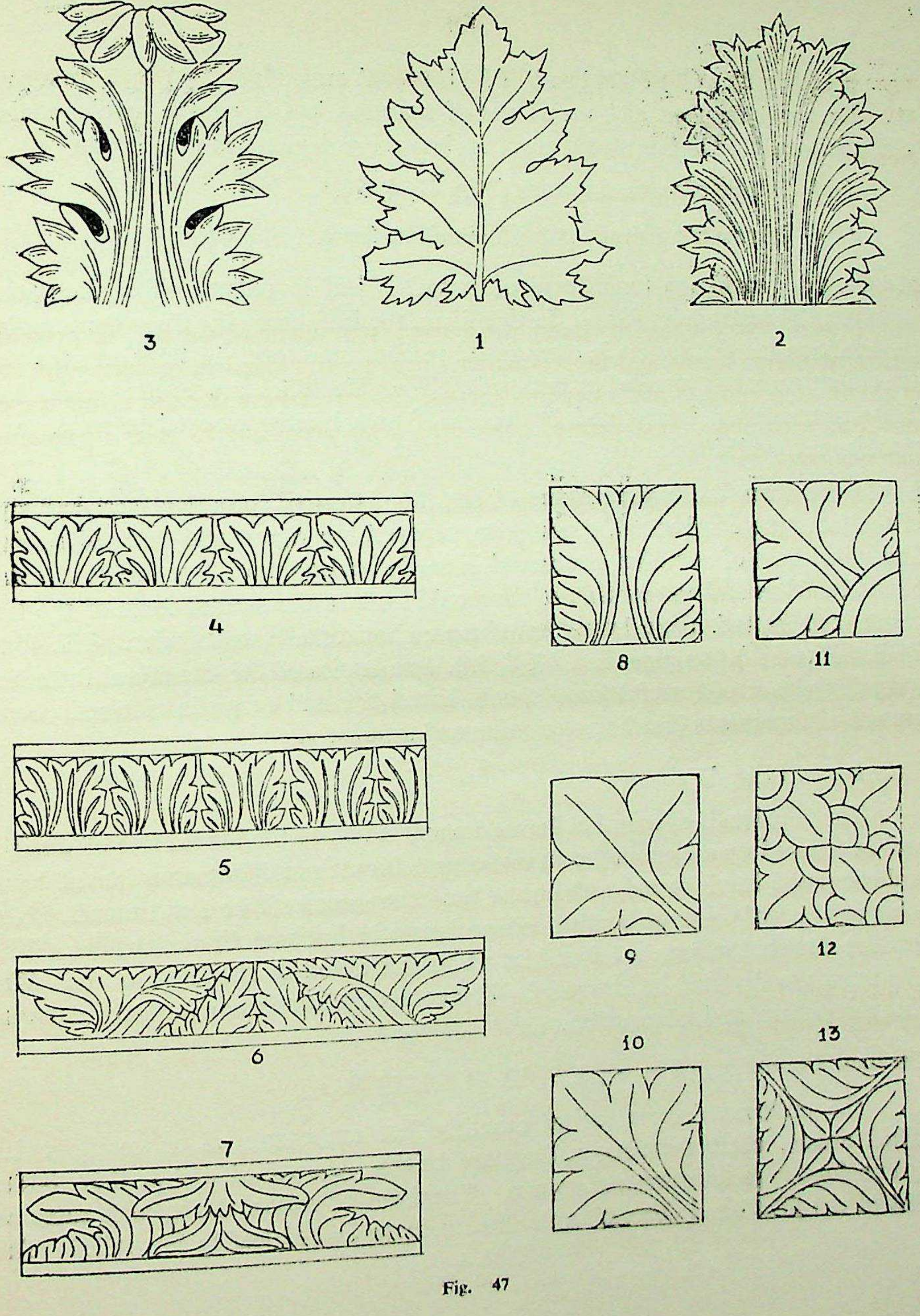

3
1
2
4
8
11
5
9
12
6
10
13
7

Fig. 47

(1) Mould. (2) Fillet band. (3) Enclosed ornament. (4) Free ornament.

A. The most frequent and varied use of acanthus leaf is on the ovolo shaped ellipsoid mould. On this mould acanthus leaves are depicted in two forms:

(a) In row of vertical sprouts (Fig. 47, 4, 5).

(b) In row of vertical composite intricate form. (Fig. 47, 6, 7).

a. On this mould the basic form of acanthus leaf is palmette-like decoration in horizontal rectangular form. In this form, the leaf, emerging from the receding base follows the quarter circle section and reaches upto top. In this form the tips the are not so much rounded as in type b. The side lobes are averted sideward. This representation is executed by means of prominently grooved serration and prominent rounded tips.

b. In this form the characteristics of serration, turn of sprouting, and end tips of the lobes are emphasized, specially to augment the vigour and force of sprout. The spinal lines of serration are curved in semi-circular lines. But due to the restricted band line and narrow field of the mould surface, the natural form of the leaf is lost, and instead, these leaves have become horizontally rectangular. (H. 4″ to 4½″ B. 10″ to 11″) (on plan: Fig. 47, 6, 7.). But inspite of this unnatural form, the sprouting vigour of forceful lines, spoon-shaped tips and curves in ulto relievo represent a harmonious blending of rhythm and symmetry.

Fillet bands: (Fig. 47).

The fillet bands of acanthus leaves are applied along the formal line of chaitya arches. Here they are employed in two compositions: purely acanthus leaves' band and composite band formed with one or two other geometric or floral motifs. The form of this leaf on these bands is either square or horizontally rectangular. The tips are depicted in low relief and serration is marked in shallow grooves. The blunt tips are depicted in low relief. The composite bands are formed by use of chequer pattern and olive stalks.

Enclosed decorations (Fig. 47, 8, 9, 10, 11, 12, 13.)

The enclosed decorations of acanthus leaf are employed on semi-circular stilted arches, chaitya arches, and square bricks. On stilted arches they occur in two forms: rectangular and square. The form of rectangular type is same as that of the fillet band decoration *i.e.* five to seven lobbed leaf in low relief. The oblique form is different. It has blunt spoon-shaped tips. As the alignment of leaf is diagonal to the enclosing square the averted tips are confined within the square and pointed towards the corners.

Free ornament (Pl. LVC).

The most important and artistic as well as intricate use of acanthus leaf is its use as a free ornament on the Indo-Corinthian pilaster capital. Here various forms of formalized and stylized acanthus leaves are employed, in horizontal tiers or rows arranged one above the other. But unlike its original Corinthian proto type the natural form of the leaf is not cared for but its serration and lobes are emphasized. Due to the squat form and over-emphasized serration, curves and lobes are exaggerated. As a result the original tenderness and simple beauty of Greek style is lost. What we have at Devnimori is the stereotype copy of the traditional standardize Roman form which exhibits the force of intricate design rather than beauty of a tender composition.

Laurel (*Laurus noilis* Fig. 48, 1).

Due to its symbolic significance and its lanceolate shape laurel leaf was introduce in decoration of architecture by the Greeks[1]. It played a conspicuous role in Greek religion as it was sacred to Apollo—the God of Sun, Song and Music and founder of cities. The conquering heroes and artists were crowned with crown of laurel leaves. Even upto this date stalks of laurel still symbolize glory[2].

At Devnimori this motif is employed in following manners: A. On mould. B. As free ornament to decorate plain surface. C. As deformed geometric form.

(A) The most frequent use of laurel leaf is on the ovolo mould. On this it is depicted in horizontal scroll (Fig. 48, 3). It is carved in groups of fours arranged in vertical rows, along the curvature of the mould. The natural form of the leaf is completely changed. It has assumed the form of an isosceles triangle resembling the shape of a spear head with two tiny flanking volutes at the base looking like barbs. The tip is pointed. Along its rib this leaf is marked with a deep incised

---

[1] MEYER, FRANZ SALES, *Hand-Book of Ornament*, p. 43.

[2] *Ibid.*

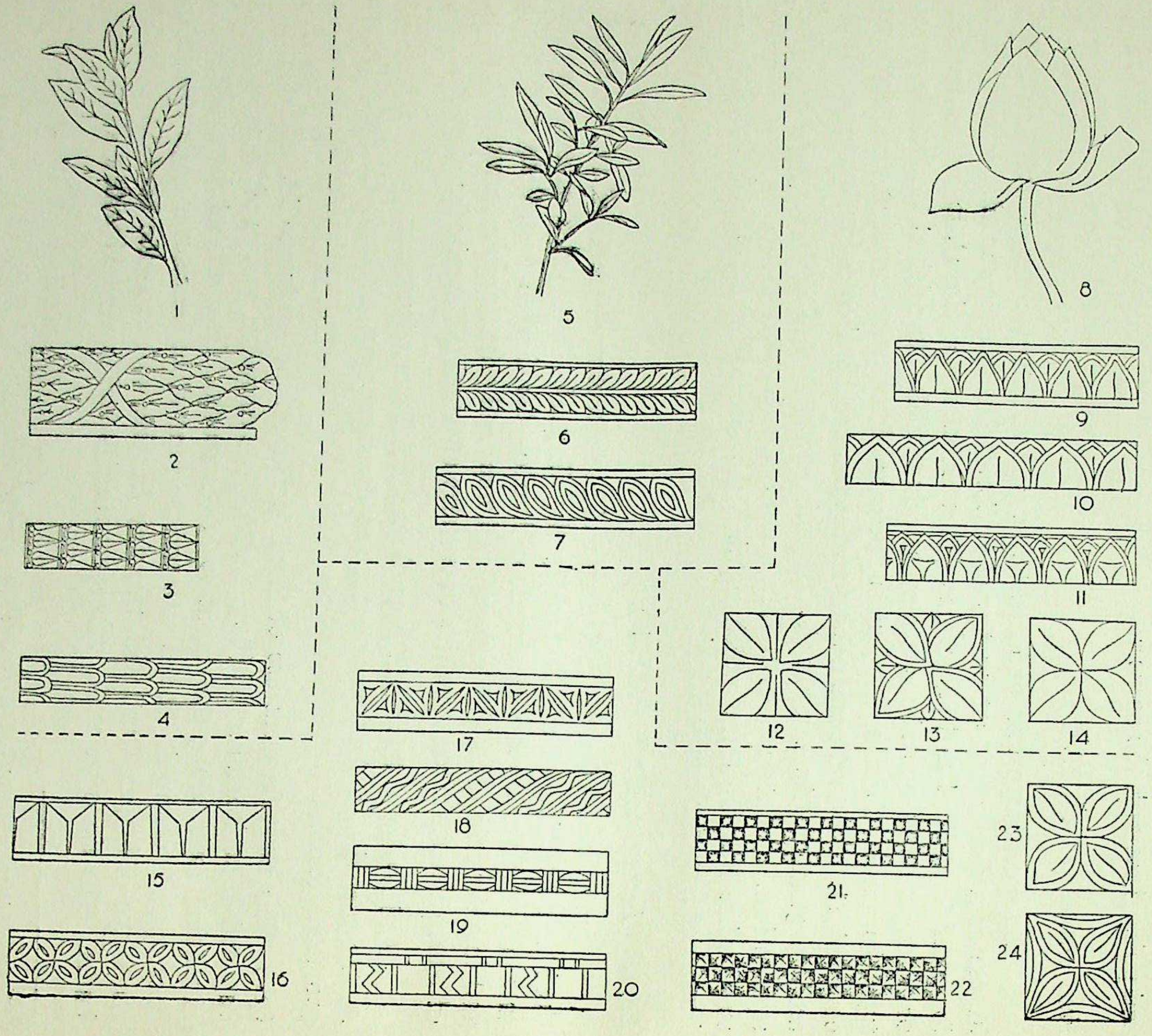

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

Fig. 48

line. The simple wedge-shaped geometric form of this leaf was employed on the rounded moulds on stilted arches.

As free ornament it decorates the surface of semi-circular stilted arch. Here also its natural form is replaced by geometric wedge-shaped form devoid of any additional decoration except incised line along its length (Pl. XLVI C).

Olive (*Olea Europea:* Fig. 48, 5)

Like laurel leaf olive leaf is also a symbolic leaf. It was sacred to Athena the goddess of wisdom, power, peace and prosperity, hence, olive branch symbolizes peace. At Olympian games olive branches were prizes for victory. In Rome heroes were welcomed with wreaths of olive boughs[1].

The elliptical form and straight stalk of olive plant provides only one type of decoration—fillet band, hence, on all terracottas of Devnimori olive leaf is depicted in only one decoration—vertebrate band. As such the fillet band of olive-leaf decoration occurs on all forms of arches—chaitya as well as semi-circular stilted arches.

It has two variations: (Fig. 48, 6, 7) The usual double leaf stalk and single leaf stalk. The olive stalk is employed even as a separating band between two main bands or other enclosed decoration on jambs Pl. XLVI C).

The original olive leaf is slightly elliptical but at Devnimori its tip is widened and shaped into a spoon-shaped form.

Lotus (*Nelumbium Speciosum*: (Fig. 48, 8).

Lotus (*Padma*) is also a symbolic water plant. It was freely used in Egypt, Assyria and India. It was sacred to Osiris and Isis. It symbolized recurring fertilization of land and immortality[2]. In India it is attached to *Lakshmi*—the goddess of prosperity. In Buddhist religion it is attached to *Amitabha* and *Padmapani*[3]

Lotus calix and petals are used in various forms (Fig. 48, 8-14) according to their position in decoration. But in every form the petal is much formalized and stylized.

---

[1] Meyer, Franz Sales, *Hand-Book of Ornament*, p. 43.

[2] Meyer, Franz Sales, *Hand-Book of Ornament*, p. 48.

[3] Bhattacharya, B., *The Indian Buddhist Iconography*, p. 51.

It has pointed tip and rounded form. Every petal is decorated with a central vertical incised line. Its main use is in the form of petal-bands on the cushion seats (*Kamalasana*) of Buddha images. On chaitya arches it is employed in bands of petals either pointing up or down and in some instances two bands—one overlying the other. On square bricks and medallions it is employed in two forms: (A) Petal compositions and (B) Corolla or calix composition. The petal designs of square bricks are composed of four diagonal petals either meeting at the centre or emerging from the centre and pointing towards corners. The corolla type has the whole corolla of the lotus carved in ulto relievo in a convex bulging relief. On semicircular stilted arches some members of its jambs are covered with overlaping lotus petals.

On cushion seats the petals are arranged in horizontal rows—either single or double. The petals of upper row are pointing upward and the lower row pointing downward Pl. XXXVII-XXXIX).

Human and Faunal Decorations

Buddhist artists represent the Great Master in an anthropomorphic form. The superhuman self restrained dignity of Buddha is depicted in *Dhyana-mudra* (seated meditation posture). Although the form and posture of these images are uniform they differ in features of face and treatment of drapery etc. A detailed study of these is incorporated under descriptions of the terracotta figures on following pages.

Another example of human body as a decoration is a fragment of a female torso. It represents a female figure in *Dvibhanga*. The head and parts of hands of this figure are broken. This figure was attached to the jamb of a semi-circular stilted arch, hence, it can be assumed that human figure was employed as free ornament also. Similar figure on a full repose is found from Taxila[1].

The enclosed ornament of human face is common on square bricks. One grostesque face is found on the central medallion of a chaitya arch also. These grotesque faces in front pose are depicted on the plain surface of square bricks. They are in low relief produced by prominent incised lines and low relief modelling. The wide open bulging eyes, bare teeth, destorted drawn up lips, and snorting nostrils produce the destorted ugly face. These bricks like those at Mirpur-Khas[1] were studded on the face of the structure under round moulding and thus formed a part of surface decoration.

---

[1] ASI, 1929-30, PL XVI 3 (SK 1507/2).

Faunal Motifs.

The use of animal figures in natural or idealized forms is less frequent than that of the floral decorations. In fact only lion figure (*Flis leo*) is utilized as a motif of decoration. The majestic stature, compact proportionate muscular build and strength and courage are the main attractive characteristics of this noble creature. It was a common decorative device in Assyrian, Egyptian, Greek and Roman architecture[2].

At Devnimori, the lion is depicted in two forms:

(1) Free ornament (2) Enclosed ornament.

As free ornament it is depicted on the top member of jambs of semi-circular stilted arches, surmounting the bell-shaped band of inverted acanthus leaves. Here lion is depicted seated on haunches. As it is comparatively a small figure (5½" high), only its prominent features like the mane, wide mouth, eyes, powerful paws and muscular things are depicted. No other details are added (Pl. XLVI D).

As enclosed ornament the lion appears on square bricks. But in this case only the front pose of his head is depicted. His face is represented by typical wide open mouth, mane, moustaches, snub nose, and bare teeth (Pl. LXI E.)

Artificial and Geometric motifs (Fig. 48, 15-24).

This group of motifs can be divided into two sub-groups:

(1) Based on artificial objects. (2) Geometric figures and designs.

1 A few decorations are derived from following objects:

(A) Flower vase (B) Bead and reel.

A. The vase is employed as free ornament to decorate the front surface of jambs of semi-circular stilted arches. This vase has funnel-shaped mouths and globular body tapering towards the base which has averted rim. Similar forms were common

---

1. Cousens, Henry, *The Antiquities of Sind*, Pl. XXIV.
2. Meyers, Franz Sales, *op. cit.*, pp. 63-64.

in Greek vessels[1]. A trident-like floral decoration is sprouting out of these vases, probably symbol of *Triratna* (Three jewels of Buddhist religion—*Buddha*, *Dharma* and *Samgha*—Pl. XLV C).

B. The bead and reel motifs are depicted on low relief mould. These motifs are much deformed compared to their original Greco-Roman form[2]. The bead is barrel-shaped with an incised lines along its axis. The reel is nothing but vertical ellipsoides in relief. These two motifs are used on bands which separate the main bands on chaitya arches and semi-circular arches. Unlike its original use in Greek and Roman architecture, it is not used as an independent mould like the ovolo-shaped moulds of acanthus leaves and laurel leaves (Fig. 48, 19).

(2) Geometric figures and designs can be classified into following classes:

(1) Lines (2) Chevrons (3) Chequers (4) Circles (5) Squares.

(1) Lines are produced by relief ribbing and incision. The ribbed lines are ½" to ¾" broad. They are employed for separating the decorations and bordering the motifs. They are straight, wavy and even zigzag. Sometimes dotted lines are also used to adorn the decorative features like dentils etc.

(2) Chevrons in relief or incision are used for decorating borders on chaitya arches and top portions of dentils. These chevrons are sometimes further decorated with vertical incised lines.

(3) Chequer lines pattern: This pattern is composed of alternate carved out and vertically crossed squares. It is the most common device of decorating plain surfaces. It is employed to produce fillet bands at the base of cornices. On square bricks they are employed as enclosed ornament confined within the square border. On chaitya arches and semi-circular stilted arches chequer patterns are employed as free ornamental bands.

A laurel-leaf-like floral motif can also be classified under this head because in this instance the obliquely aligned leaves are carved within tiny squares which are half carved diagonally. This motif is employed on all arches in bands as well as surface decorations (Fig. 48, 22).

---

[1] HEYDEN, A.A.M., VAN DER & SOULLARD, H. H., (Ed. by) *Atlas of the Classical World*, p. 63.

[2] FLETCHER, Sir BANISTER, *A History of Architecture*, **15th Edition**, p. 125.

(3) Incised circles form two main decorations: Independent circles which form the border decoration of chaitya arches and semi-circular stilted arches. Bisecting incised circles are employed to produce four petalled floral design within overlapping circles (Fig. 48, 16; Pl. XLV D, XLVI B).

After this study of basic elements of decoration, the technique of manufacture of the art pieces is described below. Here it is shown how these motifs are actually employed in various patterns.

Technique

As far as the technique of modelling is concerned the images, decorative slabs and decorative bricks from Devnimori can be classified into following main divisions:

(1) Images (2) Arches (3) Capitals (4) Medallions (5) Decorative bricks.

As already stated above the Mahastupa of Devnimori was embellished with terracotta work only. The clay utilized for the manufacture of these art pieces is finely levigated alluvial clay devoid of impurities. The firing of these terracotta works is of such a high standard that some of these pieces (inspite of their big sizes) are crimson red.

Images (Pls. XXXVII, XXXVIII, XXXIX, XL, XLI, XLII and LX)

The Buddha images are the most eloquent specimens of a balanced blending of art and craftsmanship. They are made from fine well lavigated clay devoid of any other impurities, except fine sand. This clay seems to have been obtained from the alluvium of the river. As the water was most essential for the whole process the fabrication of these images was carried out probably on the river bank in open. A number of animal foot-prints on some bricks support this assumption.

The technique employed is what may be called 'piece modelling' technique. These images are not moulded images as they may appear at first glance but are modelled individually. This fact is evident when the proportions and measurements of various parts of body are compared minutely. Various parts of body such as head, torso, hands and legs were modelled separately and then assembled together.

The process of fabrication can be divided into following stages:

(1) Primary modelling of various parts of the body individually.
(2) Assembling these parts together.
(3) Finishing of joints.
(4) Sticking and finishing of minor limbs.
(5) Rendering the details of various features.
(6) Applying slip.
(7) Drying.
(8) Firing.
(9) Colouring.

(1) *Primary modelling of various parts of body*

For the purpose of convenience and accuracy of proportions the body was divided into several parts from joint to joint. For this purpose the body was probably divided at every bending joint. The following parts were prepared separately:

(1) Head (2) Torso (3) Arms (4) Fore-arms (5) Hands (6) Thighs and legs (7) Feet.

From the above method of division of various parts of the body, it will be clearly evident that the sculptor has divided the body into several parts according to positions of bends of various limbs. This was economical from the point of view of labour also, because when a certain part of body is standardized in form and posture its replicas can be manufactured even in lots. Thus when a modeller prepared certain limbs, with constant practice, concentration and repeatition of the same job, he might definitely be working in a well defined technique. By this method of work uniformity can be ascertained to quite a fair extent, which was a very important factor in the making of Buddha images, because the artist has in his imagination certain conventional figure of Buddha conceived according to religious tradition. He had to put in every image what is called the *Prana* (soul) of the Great Master in a superhuman divine body. Even a slight mistake of proportions or uniformity was intolerable. So the facial features, position of hands, typical curves of fingers etc. had to be finished with utmost care and concentration.

(2) *Assembling of various parts*

During this stage various parts of body were joined together by their natural postures.

The squating position of *Dhyanamudra* (Meditation) is such that the legs and things produce roughly widened V shape. This posture produces a heavy flat base of the image which provides a stable base. So it can safely be assumed that this part of the body was first placed on the rectangular slab of lotus throne. The other heavy piece was the torso. It seems that it was placed on the thighs in vertical position. After this the arms were stuck to the respective shoulders.

For the purpose of meditation posture the forearms were bent inward and placed in the lap just above the upturned heels. To produce this posture the forearm was attached to the elbo at an angle of about 100°. Finally, hands with fully stretched straight fingers and raised thumbs were attached to knuckles in slightly angular pose.

After this the head was fixed on the torso. The back support of a rectangular slab was attached to the image at a perfect angle in such a way that there should not be even slightest stoop.

(3) *Finishing touches on joints*

Mere assembling of various parts will not produce a natural finish, so it seems that some soft semi liquid clay was applied at every joining point to render a natural bend of that particular portion of the body. This job demanded very careful and accurate workmanship because even a slight mistake in this process would spoil the beauty of the whole image.

(4) *Adding the minor limbs*

To complete the human form, ears were attached to temple and fingers and thumbs to hands and feet. Rendering of ears was very important, because according to Buddhist traditions Buddha had all the thirty-two *Mahapurusha Lakshanas*, one of which was the abnormally elongated earlobes[12]. The fingers and thumbs were not given so much attention. Only their shapes were represented. The Urna or a tiny hair tuft—a sign of yogi[13]—was represented by a spherical tiny dot in relief just above the centre of the eye-brows.

---

[12] *Lalitavistara*, as quoted by Grunwedel in *Buddhist Art of Gandhara*, p. 159.

[13] *Lalitavistara*, as quoted by Grunwedel in *Buddhist Art of Gandhara*. p. 159.

(5) *Rendering the details*

When the figure or the form of the body proper was ready, following details were added:

a. drapery. b. hair c. details of facial features.

The folds and frills of drapery were depicted by two techniques: (a) by incised lines, either single or pairs, and (b) ribbed lines. Complete details of drapery are not represented but only their salient features, because the drapery is 'transperent' (under which anatomical features of body are visible).

The effects of eye-brows are produced by ribbed bow shaped lines. The half closed eye-lids are depicted by deep crescentic cuts.

(6) *Applying the slip*

Finally an even slip was applied all over the image for a final finish and to produce a smooth texture.

(7) *Drying*

The drying of the image demanded special attention, because if the drying is not gradual and uniform all care taken upto this stage would be of no use. Moreover there were all possibilities of cracking, during this process. It seems that for this purpose the images were dried under shade and not in the hot sun.

(8) *Firing*

No evidence of firing kiln could be traced during the excavation. But it seems that this process also must have been done very carefully. Considering the size and thickness of section of the images it seems that they required very high temperature. Accidents of over burning, breakages etc. at this stage are known.

(9) *Colouring*

Finally the images were coloured with whitish cream colour some traces of which are retained on some of the images. Like their close allies from Mirpur-Khas[14] these images were not polychrome with details of eye-brows, eyes etc. but were painted with only one colour.

---

[14] *ASI*, 1909-10, p. 90.

Arches

As regards the shape and technique of manufacture arches can be classified into two groups:

(1) Semi-circular stilted arches (Pls. XLIIIV, XLIV, XLV, XLVI).
(2) Chaitya arches.
  (i) Having wedge-shaped undercut (Pls. XLVII, XLVIII, XLIX, 4).
  (ii) Having central medallion (Pls. LI, LII, LIII, LIV, LVA).

The process of manufacture of both these types can be divided into five stages:

(1) Preparing the form,
(2) Drawing the lay out of decoration,
(3) Carving and finishing,
(4) Drying,
(5) Firing.

First the shape or the form of the required arch was modelled with some sharp instruments which is clear from the neat cuts of the form. After this the lay out of the proposed decoration was drawn on it. The carving of the decorative patterns was accomplished by two techniques: The floral motifs were attempted in smooth but slightly obliquely carved cut to produce a soothing effect of mild shade and light while the geometric designs were marked with sharp deep incisions. After this the finishing touches such as finishing of tips of leaves etc. were given. Finally piece was coated with a fine slip.

All these processes were done when the artifacts were still damp. Upto this stage they demanded careful handling. Due to their size (semi-circular arches B. 3′-10″×H. 4′ and chaitya arches B. 3′-1½″; H. 1′ 7″) their transport, when damp, was also difficult because a slight jerk or uneven base level may twist the damp piece or even break it. But in such condition it was very easy to cut them into convenient pieces, hence, for the purpose of convenience, tallying lines were drawn along their edges and borders before cutting the whole piece into convenient slabs. These lines are clearly visible on almost all decorative pieces.

For this purpose the chaitya arches were cut into vertical halves while the semi-circular stilted arches were cut horizontally into nine or ten components.

After all these processes these pieces were dried under shade and were finally put into kiln for firing. At the time of actual use the pieces were assembled and put at their proper positions. At that time the tallying lines were checked for accuracy.

Medallions (Pl. LVIA, LV D)

The circular medallions were prepared in *ulto relicvo* on field of square slab (1'-4" × 1'-4"). It seems that a prominent disc of about 1.5 inches thickness in relief was carved out on the square slab. After this the outline of respective design was drawn on it. Finally the cuts and curves were produced by carving. As the medallions were generally decorated with floral motifs only, carving was executed with utmost care to render the natural form of the motif.

Capitals (Pl. LV B, C)

The capital of pilaster is carved on a rectangular clay slab (1'-1" × 0'-10" × 0'-6"). Only its front and part of side portion which was protruding out of the structure were worked upon. This portion was divided into three horizontal bands of sprouting acanthus leaves of various forms and sizes. It seems that for this purpose each band was divided into several parts according to number of leaves to be depicted on it. The leaves are depicted in bold relief by carving them with some sharp instrument which gives it powerful lines of twists and turns. For this purpose the spinal lines of lobes are marked with deep grooves, and tips are brought into relief by carving off its surrounding field.

Pilasters (Pls. LVI B)

These pilasters were the replicas of the bigger pilasters which form the part of the architectural features. Hence they are also composed of base, shaft and the capital. They are rectangular in section with two roughly flared ends, one of which forms the base and the other the capital. It seems that first a long rod-like rectangular lump of clay was taken on which the outlines of base, shaft and capital were marked. The plain base was prepared by modelling it by scraping off extra clay to form moulds. The shaft was carved out plain. The capital was copied from the bigger capitals of the main pilasters.

Bases of pilasters

These bases were prepared from thick square slabs. As they were simple pieces devoid of any decorations of carving they were given roll mould or rounded grooves by gradual process of scraping.

Brackets or Dentils (Pl. LVII)

Brackets or Dentils can be divided into two groups:

(A) Long rod-like rectangular independent pieces (B) Groups of threes on rectangular bricks.

(A) This type is made of long shaft-like slab of clay. One of its ends which was to be kept jutting out of the structure was worked. It was first scraped to produce angular concavities to produce a hyperboloid section with a flat top (kept such to support the surmounting member of the structure). The concave surfaces of this end are decorated with incised designs, wavy lines and dots.

Technique of Type B which falls in the category of decorative bricks is given under the head of decorative bricks.

Decorative rectangular bricks (Pls. LVIII and LIX)

This group is named decorative bricks because they have the same dimensions as those of the plain bricks used for constructional work (17″ × 10″ × 2″). As they were to be inserted into the structure, keeping its decorated side visible, only their longer flanks were worked. These sides were chamfered and then decorated with various floral motifs, of acanthus or laurel leaves. The geometric pattern of chequer design was executed on the plain surface.

For floral patterns of acanthus and bay leaves the facet of the brick was divided into convenient compartments. As the horizontal band of these bricks would be visible from a lower view point the lower corner of the brick was chamfered in an ovolo section in such a way that the vertical acanthus leaves in relief would look like sprouting from under the brick.

To produce the bay-leaf motif the chamfered side was divided into four horizontal bands of rectangles in string courses. Then each rectangle was divided diagonally into two halves. Then each adjoining pair of right angled triangles having adjoining right-angle was carved off, leaving a deep cavity. The result of this process would be horizontal bands of wedge-shaped motifs pointing in one direction. The wedge-shaped motifs were further decorated with incised lines along its axis.

Square bricks (Pls. LX, LXI, LXII, LXIII, LXIV and LXVA)

These bricks are prepared from square slabs (5″ to 6″ square). As only its square face was to be kept exposed, only that part is decorated. First a square was marked on it leaving a plain border of 1″ to ½″ . Then the enclosed decoration of floral, geometric or faunal pattern was depicted by carving on the plain square field in low relief.

Other art objects from Devnimori can be classified into two main groups:

1. Terracottas. 2. Stone figurines.

The terracottas are chief objects of study. Stone figures are very few in number (four only).

Terracotta figures

Under the head of terracottas are described only those pieces of terracottas which have their own independent significance. As such this group includes Buddha images, human and animal figures (very small in number—6 only) and arches, capitals, medallions etc. Although some of them are the components of architectural features, they deserve special detailed study.

This group is the most important and outstanding. It is not so due to its numerical strength only, but because it is the backbone of the art traditions of Devnimori. Moreover, as already mentioned above the whole Mahastupa was adorned with these terracotta decorations only. No sign of wood or stone could be traced on the stupa. No doubt this material was commonly used in the construction of the viharas.

According to form and function the terracotta pieces can be classified into following main groups (which are further divided into sub-groups) :

(1) Sculptures.

(2) Decorative components of architectural features.

(3) Decorative bricks.

(1) *Sculptures*

This is the most important group because it includes the Buddha images—the essence of Devnimori art. According to form this group can be sub-divided into three sub-groups:

- **A. Buddha images.**
- **B. Human figures.**
- **C. Animal figures.**

A. *Buddha images*: Height 2′-2″ to 2′-3″. All the images without any exception are in *Dhyanamudra*. In all fragments of twenty-six images are discovered. Out of these twenty-six images twelve are almost intact with very slight damages and could be repaired, while remaining fourteen are highly damaged and hence could not be repaired or remodelled into complete pieces. From the fragments, the postures of other images can easily be judged.

In all twenty heads are found, out of which twelve could be refitted to their respective torsoes. No complete images could be reconstructed from the fragments of remaining fourteen. From this it will be clearly evident that about 50% of the images are highly damaged and are beyond the possibility of repairs or remodelling unless the missing pieces are manufactured anew and added to them.

But from whatever is left it is not at all difficult to conceive the original features of all the images. The bends and postures of hands and fingers are the same in all the fragments suggesting a uniform posture of *Dhyanamudra*.

All these images are executed in '*ulto relievo*' (almost three dimensional relief). Only the back of the figure is hidden from view which is stuck to the backslab of the image that has a flattened wedge-shaped top. This slab serves two purposes. It holds the image in place and serves as a masonry piece. Actually it is meant for studding the image on the face of the stupa. The top of this backslab as already mentioned above is flattened wedge-shaped in such a form that it fits in the undercut of the surmounting chaitya arches.

As already mentioned above all the images are in *Dhyanamudra* seated in *Padmasana*. To form a *Padmasana* the legs are bent inward to an acute angle at knee in such a way that their toes are brought together in the lap near the abdomen, with heels turned upward. The hands are resting in a typical mudra (pose) in the lap just above the heels. The palms of hands are turned upward with fingers stretched to full length. The right palm is resting on the left one.

The torso is kept erect in such a way that the back is kept straight without slightest stoop. The manly body is having fully developed sloping chest while the belly and abdomen are sunk back to produce a slim waist. The sloping shoulders, chest and thighs in squatting posture show only the form of the stout muscles, but not their details. They are what may be called rounded muscles. The whole body is draped in *Sanghati* (cloak-like upper garment). Only face, some part of chest near neck, hands and feet are left bare.

If the Maha stupa is the highest achievement in grandeur and imposing magnificence, the image of Buddha is the highest achievement in artistic creation. It is a well known fact that while looking at any human figure it is the face that first attracts the attention of the onlookers. The sculptors of Devnimori seem to be quite aware of this human tendency. That is why the essence of all the artistic creation had been summed up in the creation of head, or more accurately the expressive ideal form of face.

Although all the images are in the same posture and look alike at the first glance, they do have same minor differences and variations in their physical features as well as other details like drapery, hairstyle etc. To study these variations minutely, following features of these images should be studied in details:

(1) Form and features of face.
(2) Hair style.
(3) *Urna.*
(4) Drapery.
(5) Cushion seat.

1. *Classification according to form and features of face*

According to forms of head and facial features the Buddha images from Devnimori can be classified into three groups:

A. Oval faced. B. Almond faced. C. Round faced.

These classifications are based on the proportion of forehead, zygomatic arch of face, cheeks and chin.

(A) The Oval faced group is having typical oval face. The breadth of forehead and the lower part of the face are almost equal. The almoud faced has narrower lower face, and the round faced has rounded features and form.

A. *Oval faced* (Pl. XL A).

This group is comprised of only two specimens. Their proportions are as follows: Height 4", Breadth 3.7"; Nose (length) 1.35" to 1.3"; breadth 1". Zygomatic arch—3.1" to 3.2".

This type has either wavy hair or spirals of hair depicted by knobs arranged in systematic formations. Proportionately, eyes of this type are slightly bigger (1.7″ × .7″) than the average eyes of other groups. The cheeks are slightly flabby but not to much extent. The lips are also not so shapely. The chin is rounded. The segmental incised lines which represent the eye-brows are not represented so artistically. The eyelids are also a bit flabby. The wavy hair are represented by incised wavy lines. These lines are sprouting outward from the centre of the forehead and spread gradually on both sides towards temples and back of the head as they go up. They finally merge with the protruding hair-knot (hairlock) on the top of the head. The elongated earlobes are same as type B and type C.

B. *Almond shaped face* (Pl. XLI, A.).

This is the most artistic type. It has a sweet form of perfectly balanced proportionate features, which produce such a face which very aptly conveys the dignified and self-restrained personality of a *Mahapurusa* (superman).

This type has a broad forehead at the lower edge of which are segmental eyebrows represented by incised lines just on the brim of the eyesockets. Under these eye-brows are the half-closed eyes (*Ardhamilita Netra*). As the eyes are half-closed (upto only slit-like opening) the details of eyes are not visible. The eyes are kept half-closed because Buddha is represented not simply sitting in meditation but as the Enlightened One, who has already possessed the knowledge (*Jnana*) and hence has a feeling of compassion for all the creatures of the world.

The eyebrows merge with the shaply ridge of nose which emerges from the centre of the forehead, and ends in a rounded tip. Both the lips—upper as well as lower—are chiselled with some sharp instrument in such a way that they have sharp edges which render them a clear cut accurate form and individual prominence. The upper lip is marked by typical vertical depression in centre, which looks like a vertical groove between nose and upper lip. This feature gives a sharp loop to the bowshaped upper line of the lip. Both ends of this lip are slightly turned up to produce a pleasant mirth. The chin protruding down is very slightly hooked at its blunt rounded end. The cheeks are rounded perfectly. They merge with the eyes, nose, lips, chin and ears in rhythmatic curves. The plasticity and the mould of cheeks are up to so much perfection that they render a well balanced individuality to all features of face and group them in an ideal combined form of a natural and artistic form. The elongated ears are typical. They have abnormally elongated earlobes which hang even beyond the jaw and reach almost upto the shoulders. According to *Lalitavistara, Mahapadhana Sutta* and *Dharmapradipika*, Buddha had *Dakshinavarta Romaraji* (hair in spirals turning right). The spirals of hair on these images are rendered by symbolic representation of tiny hemispherical knobbles, which are arranged in systematic formations that follow the outline of forehead and the top hair-knot.

C. *Round faced* (Pl. XLI, B)

This type has generally rounded features. In type A the head with the top hairlock is slightly elongated and hence has slightly tapering top, type B has an almost flat top with prominent *Usnisa*, while this type has a rounded top. The forehead is slightly narrower (3.5″ to 3.6″) than other two types and has typical rounded curve between temple and the forehead proper. This feature is considered typical because in types A and B the temple is almost flat. The eyebrows are also in a more rounded segments. The eyes are smaller compared to type A. The nose is also shorter (1.2″) than type A and B (1.35″). The tip of the nose is also not so much pointed as type B. The lower lip is thicker and protruding out prominently. But the main feature is the form of cheeks and chin. The cheeks are rounded completely and together with the outline of head and temples make almost a perfect circular outline. The chin is not so prominent like type B.

Classification according to Drapery

Drapery is one of the most important features in classification of these Buddha images, because it provides direct evidence for stylistic background and can thus help in tracing their origin as well as contact and correlation.

It is a well known fact that whenever a figure is covered, the drapery is represented by depicting the folds and frills by typical traditional method of that particular art school. Here the seated Buddha figure is wearing a cloak-like one piece upper garment called *Sanghati*. It covers almost whole body except face, hands some portion of chest around neck and feet upto toes. The *Sanghati* is worn in two fashions—both shoulders covered and only one shoulder covered. Thirteen images have both shoulders draped while nine have only one shoulder draped. No details could be traced from the fragments of four images as shoulder portions of these images are missing.

The folds and frills of the images from Devnimori are depicted by two methods:

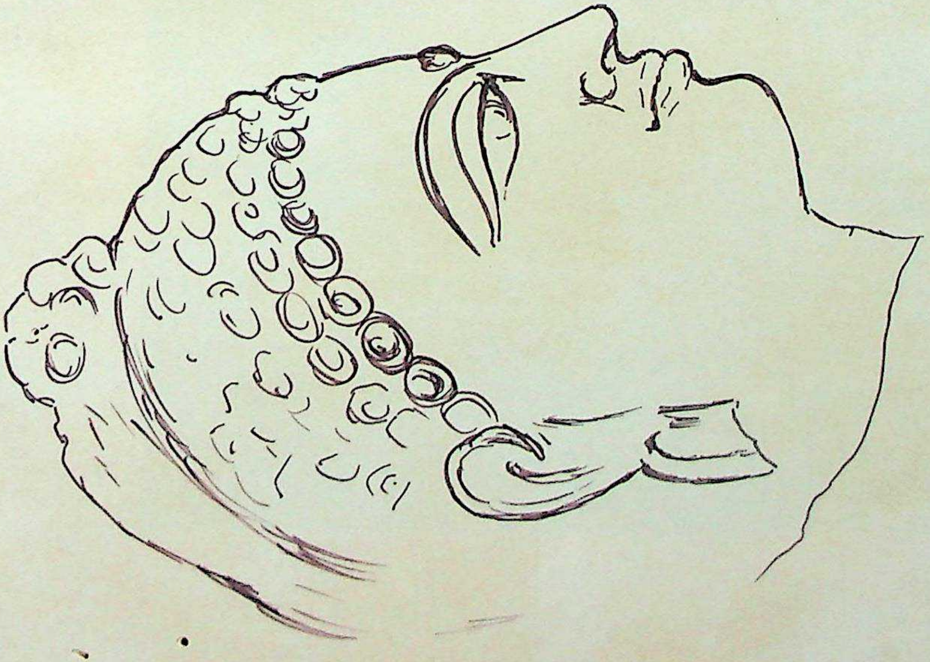
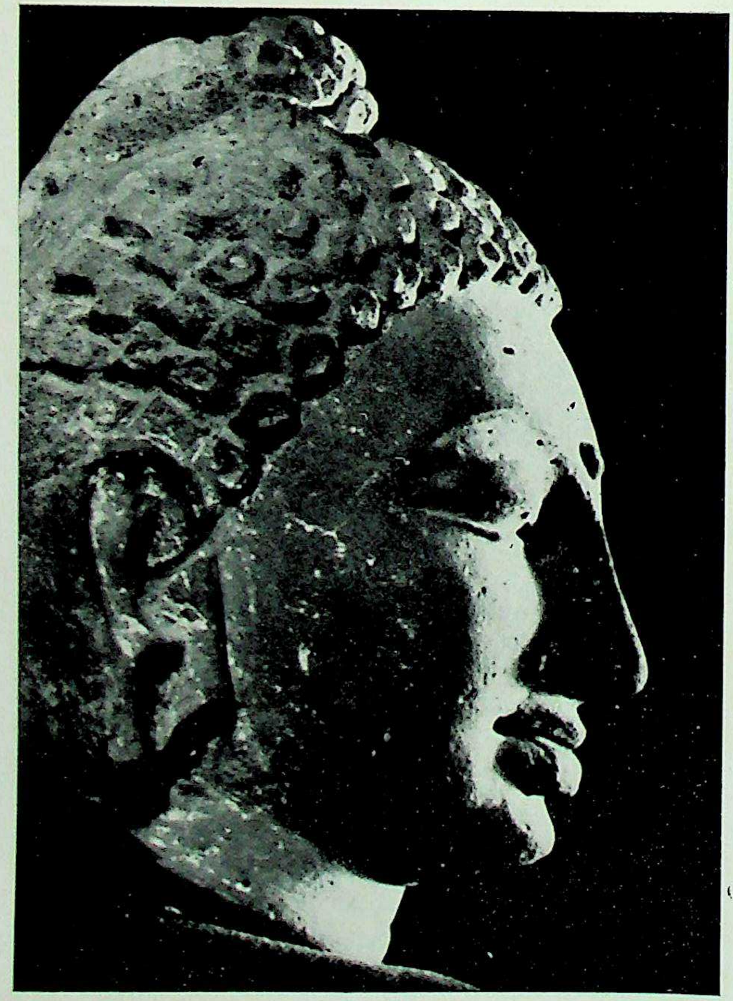
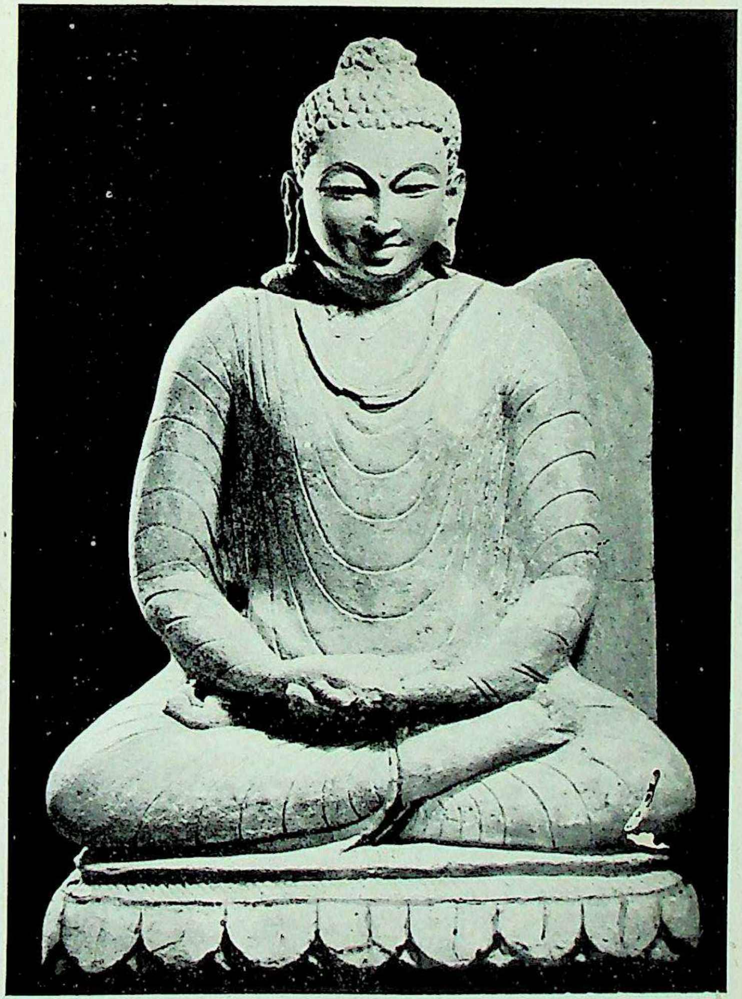


PLATE XLII

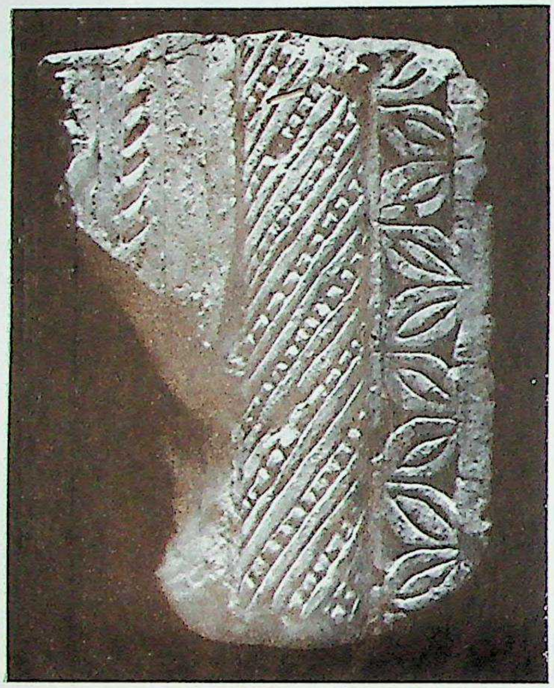


A. Head of Buddha from Mahastupa

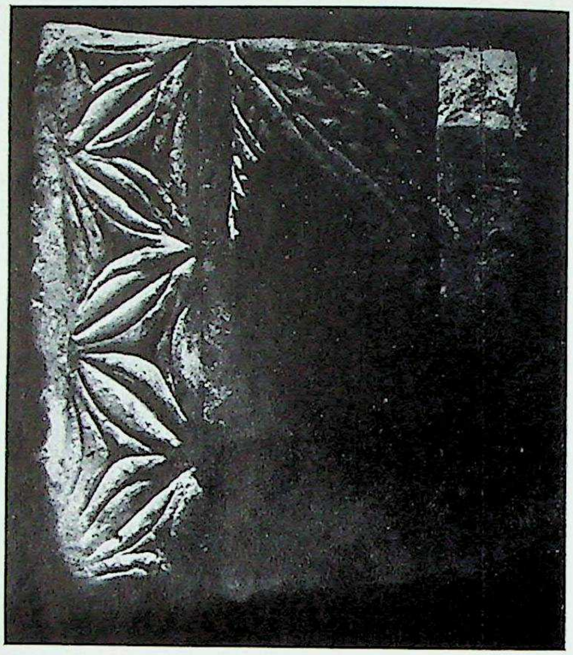


B. Buddha from Mahastupa

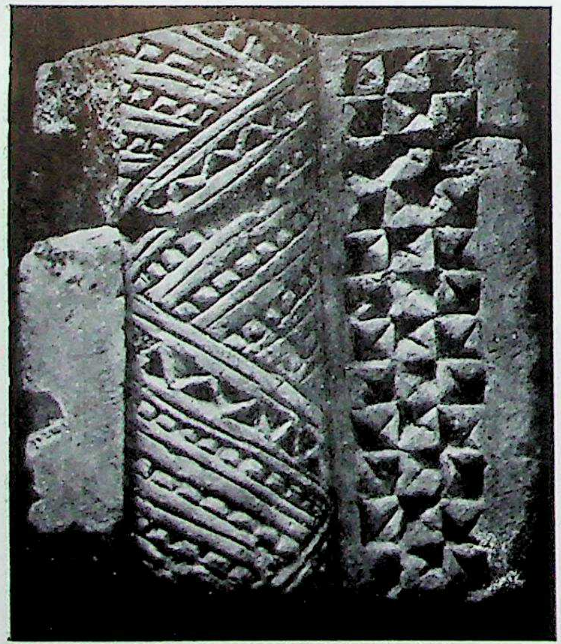
PLATE XLIII



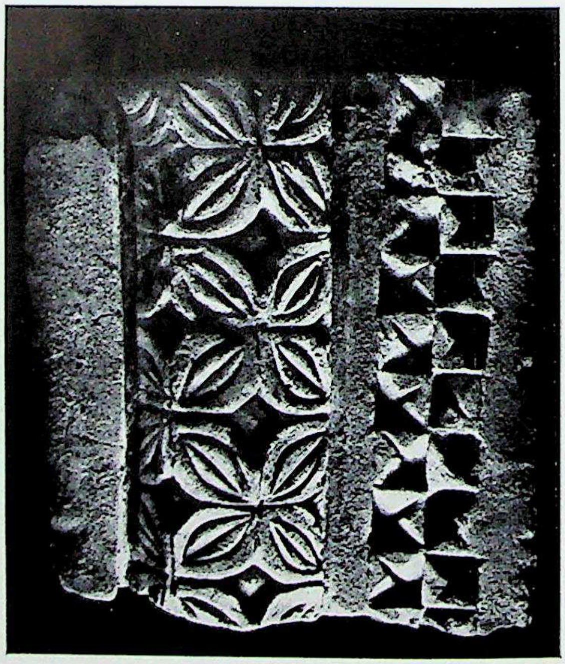
A Decorated Jamb



B Decorated Jamb

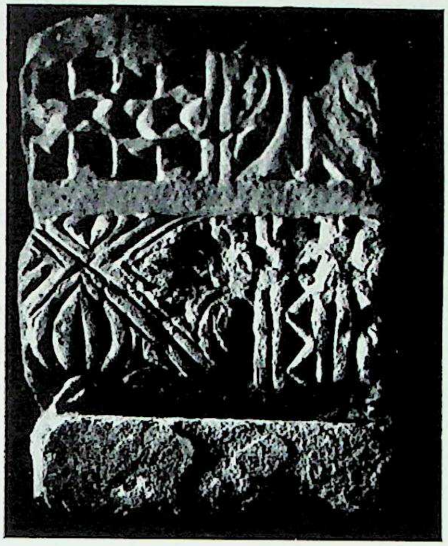


C Decorated Jamb

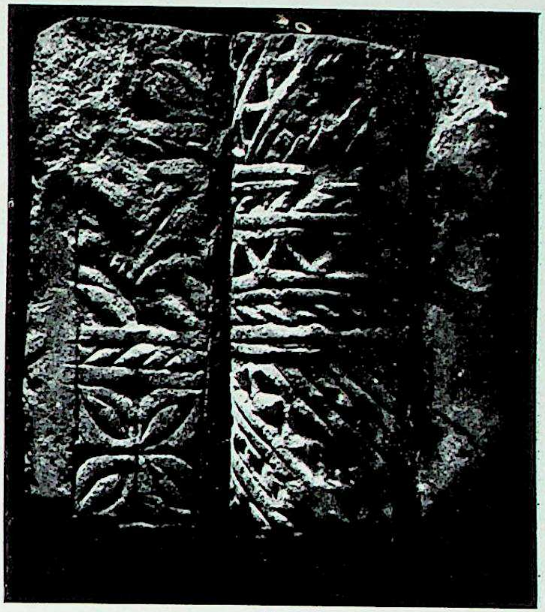


D Decorated Jamb

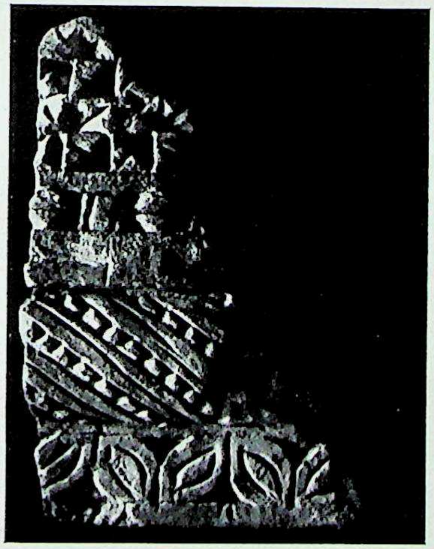
PLATE XLIV



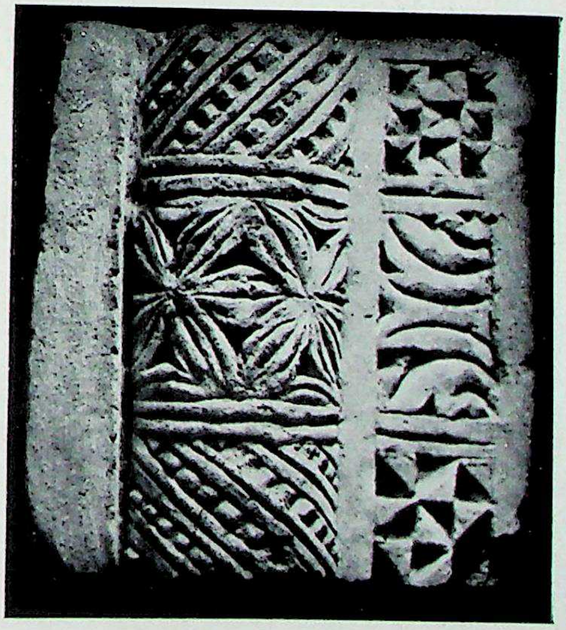
A Decorated Jamb



B Decorated Jamb

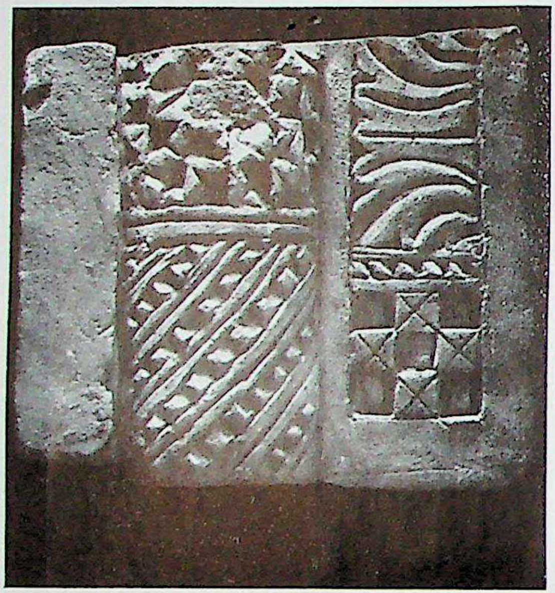


C Decorated Jamb

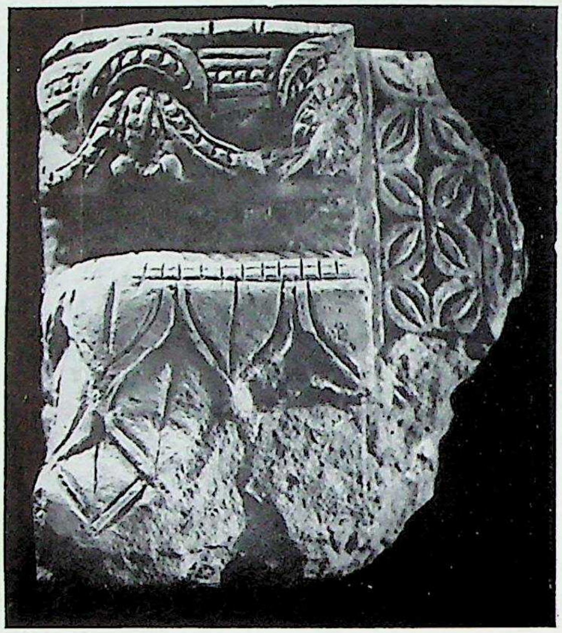


D Decorated Jamb

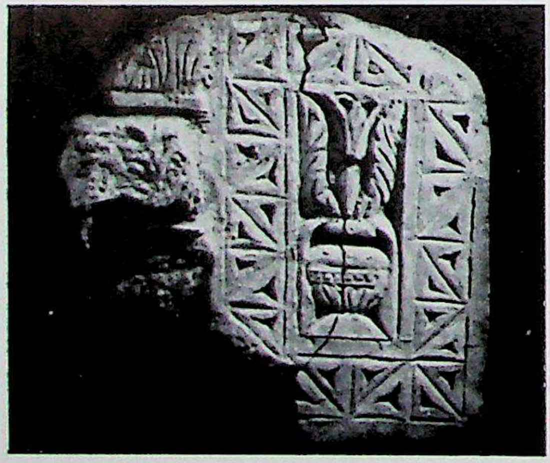
PLATE XLV



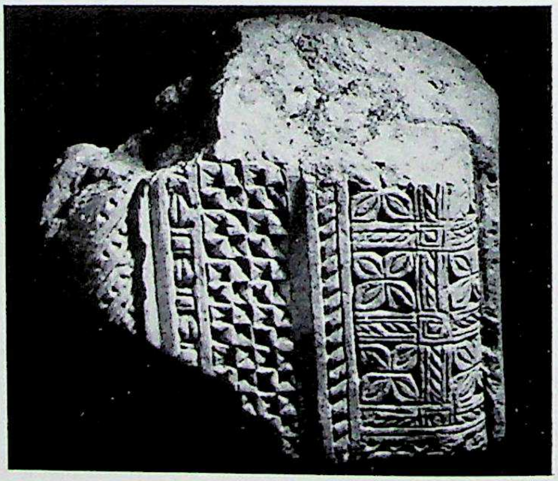
A Decorated Jamb



B Decorated Jamb

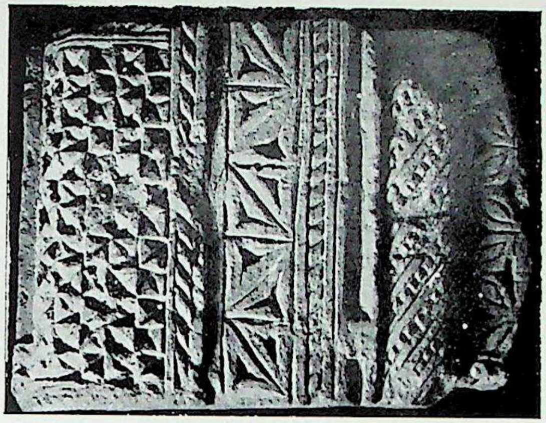


C Decorated Jamb (*Purna ghata*)

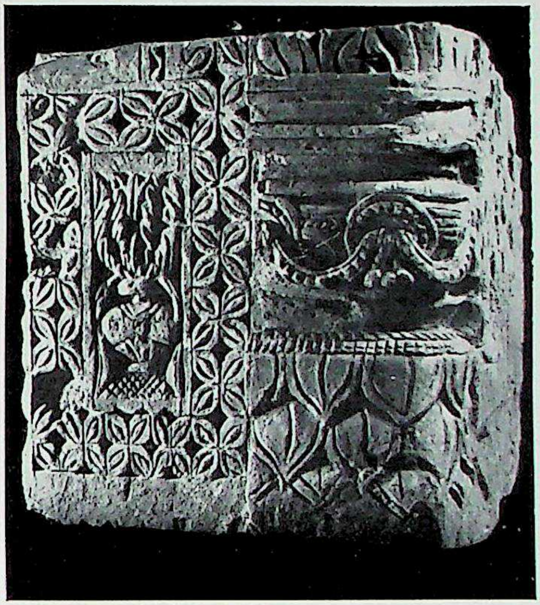


D Decorated Jamb

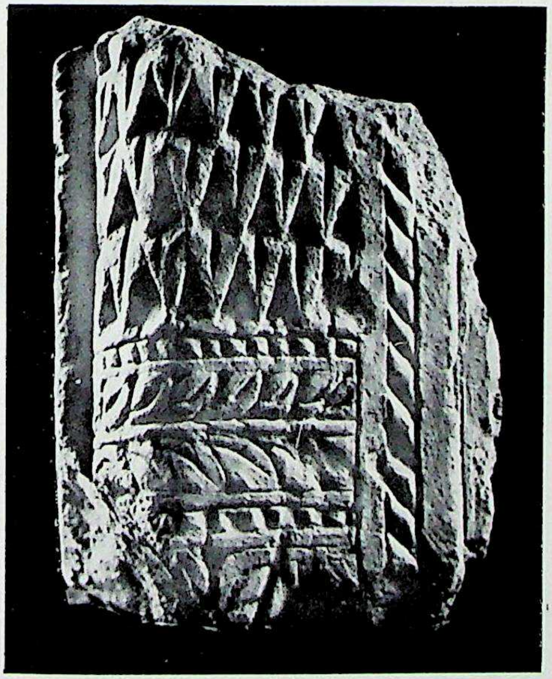
PLATE XLVI



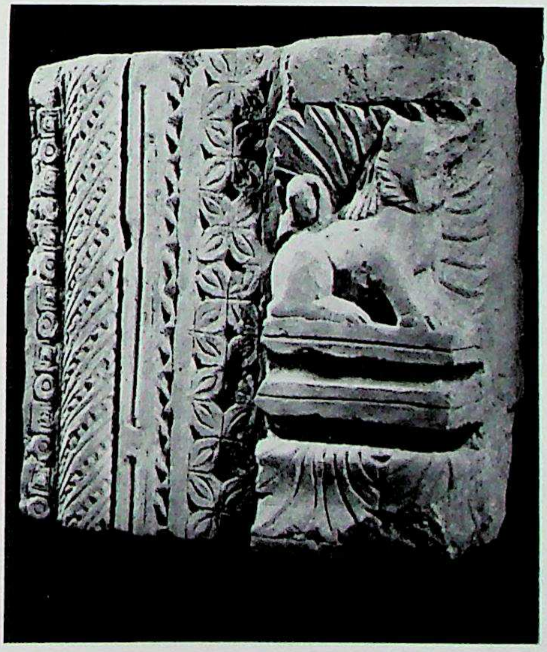
A Decorated Jamb



B Decorated Jamb (*Purna ghata*)

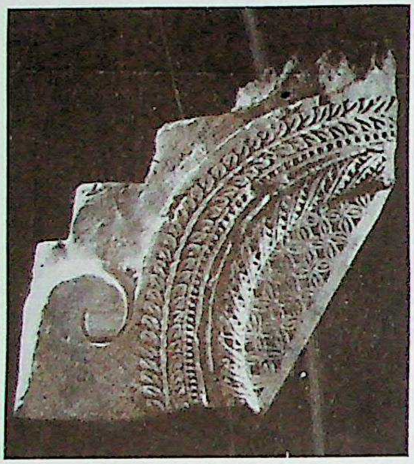


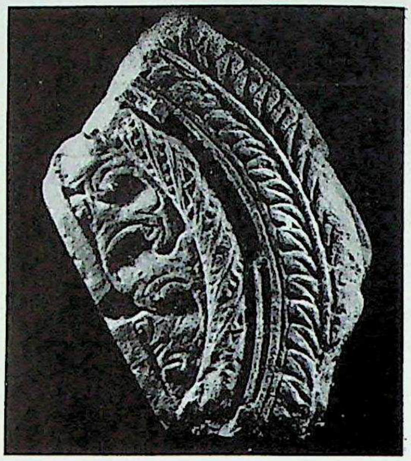
C Decorated Jamb

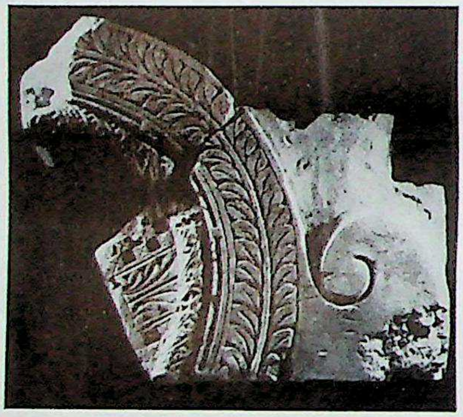


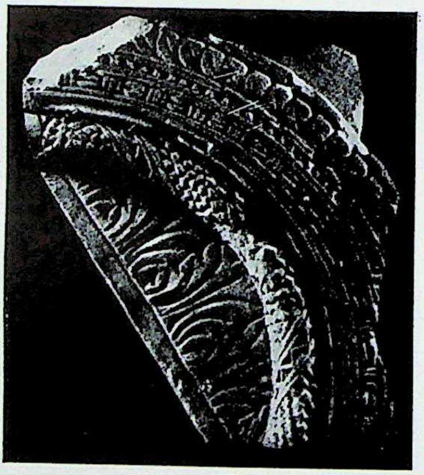
D Decorated Jamb, lion

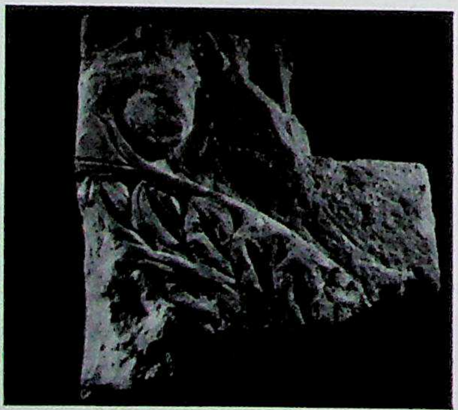
PLATE XLVII


A Decorated arch


B Decorated arch


C Decorated arch


D Decorated arch


E Decorated arch

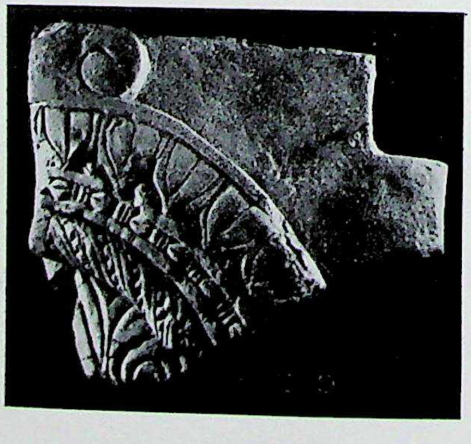
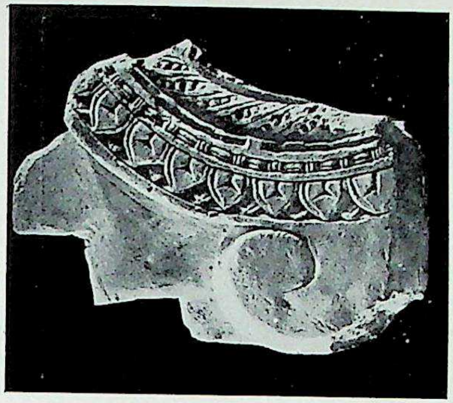
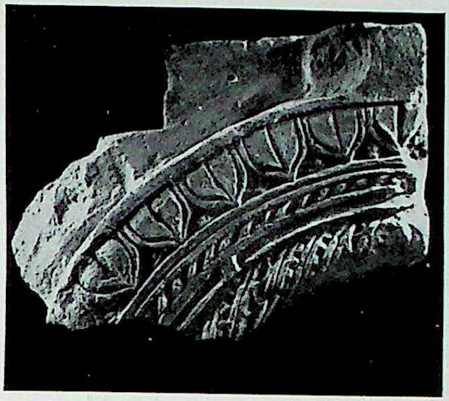

F Decorated arch

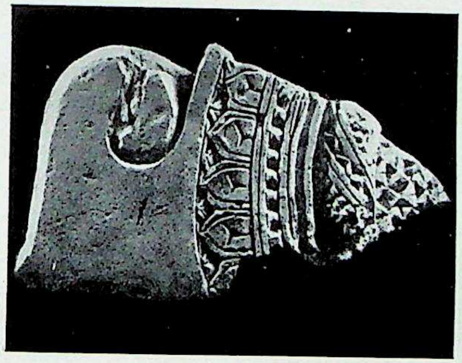
PLATE XLVIII



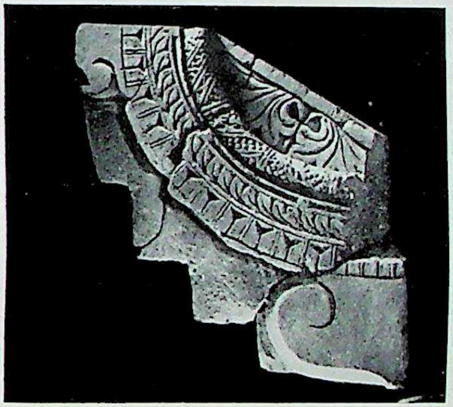
A Decorated arch



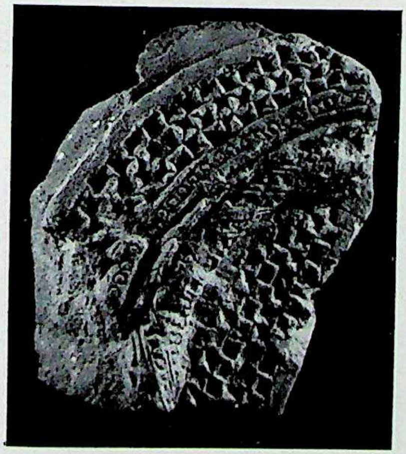
B Decorated arch



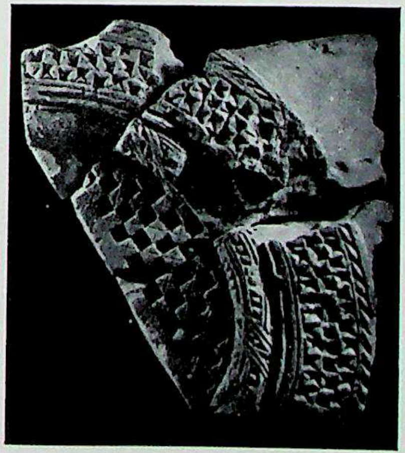
C Decorated arch



D Decorated arch

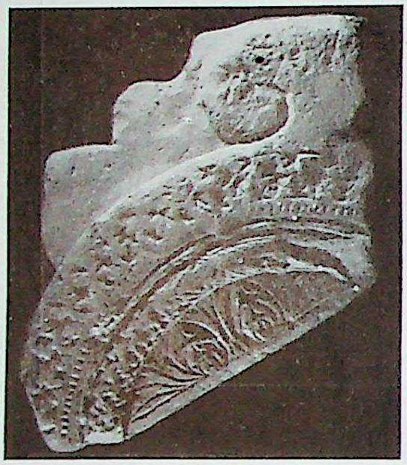


E Decorated arch

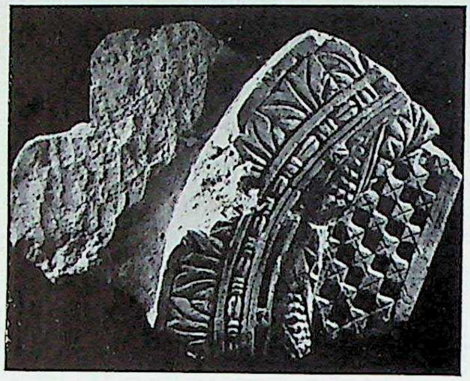


F Decorated arch

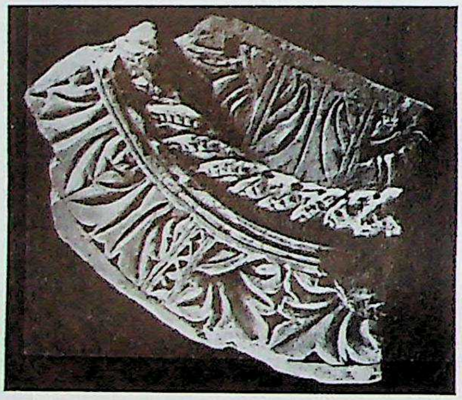
PLATE XLIX



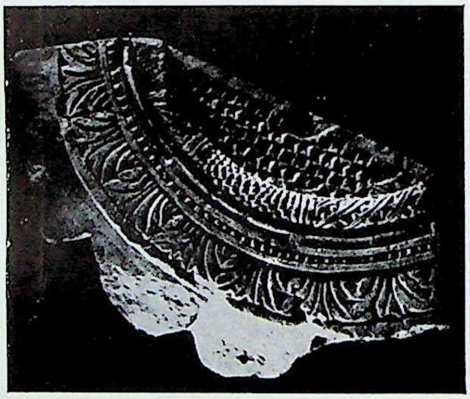
A Decorated arch



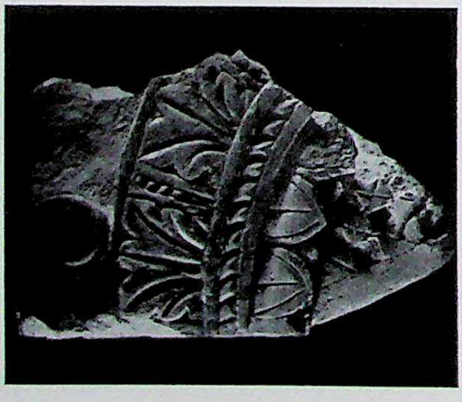
B Decorated arch



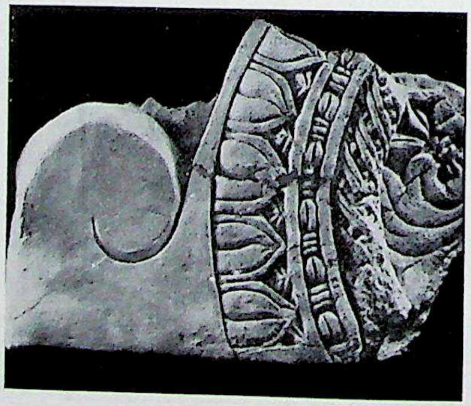
C Decorated arch



D Decorated arch

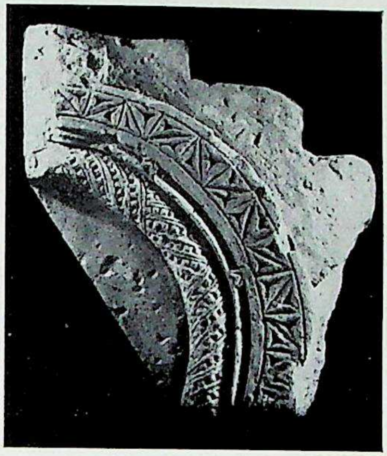


E Decorated arch

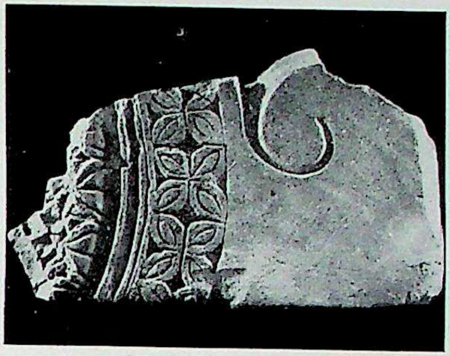


F Decorated arch

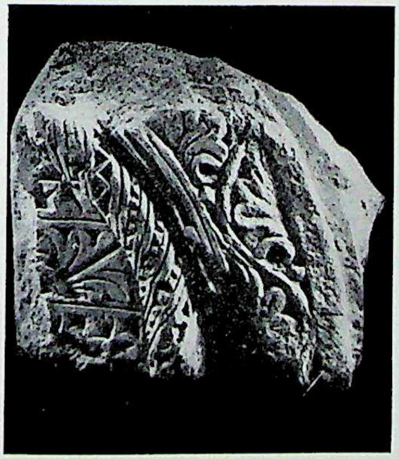
PLATE L



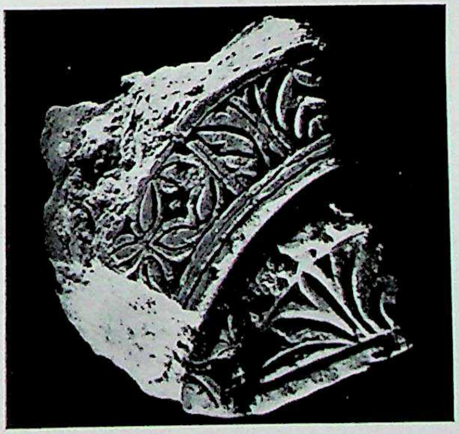
A Decorated arch



B Decorated arch

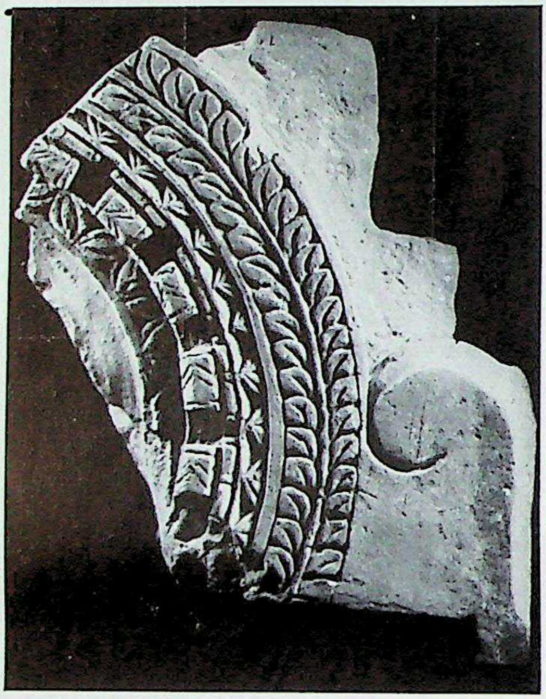


C Decorated arch

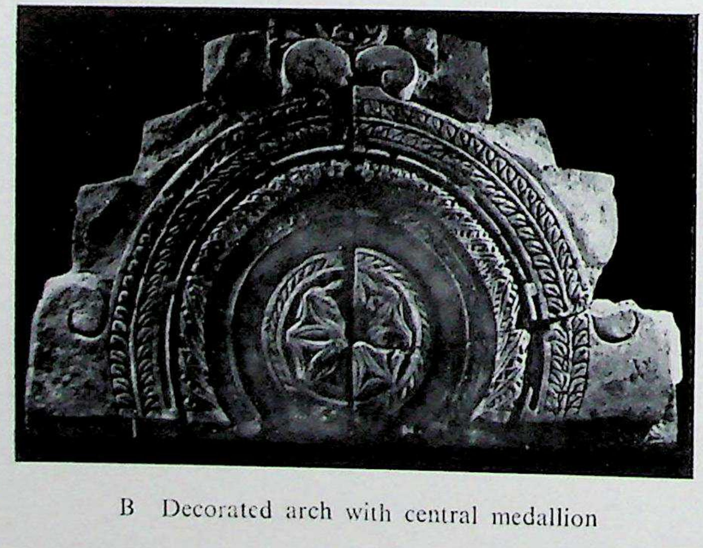


D Decorated arch

PLATE LI

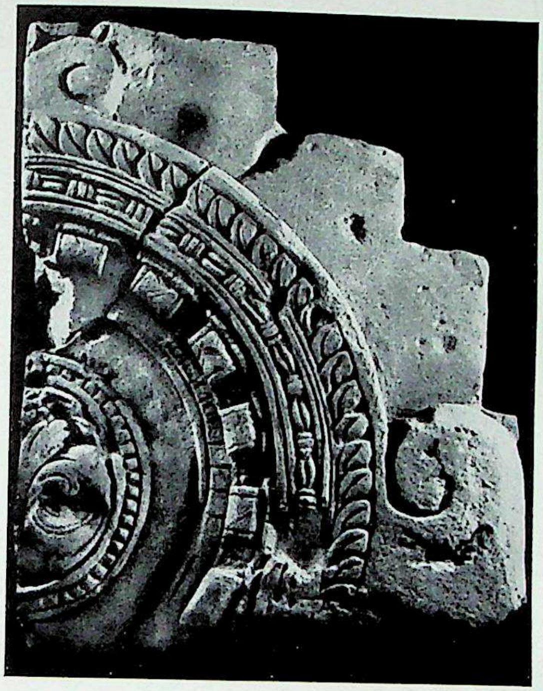


A Decorated arch

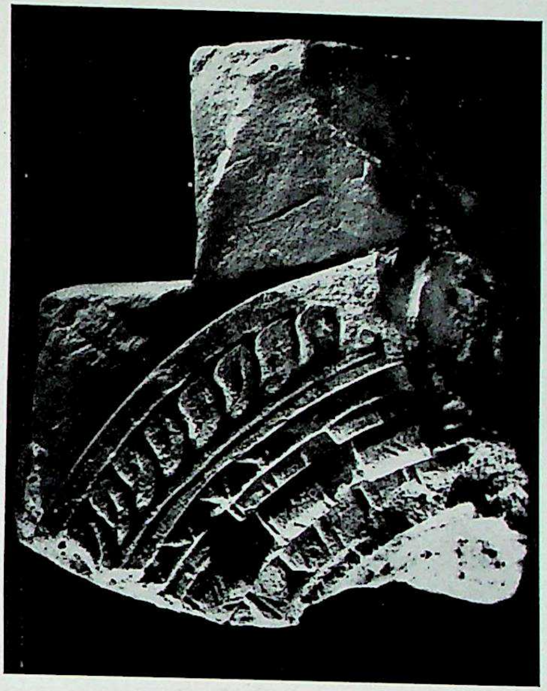


B Decorated arch with central medallion

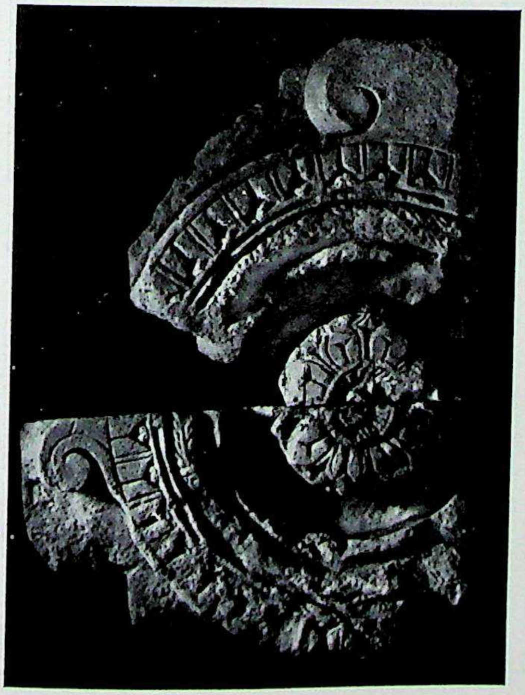
PLATE LII



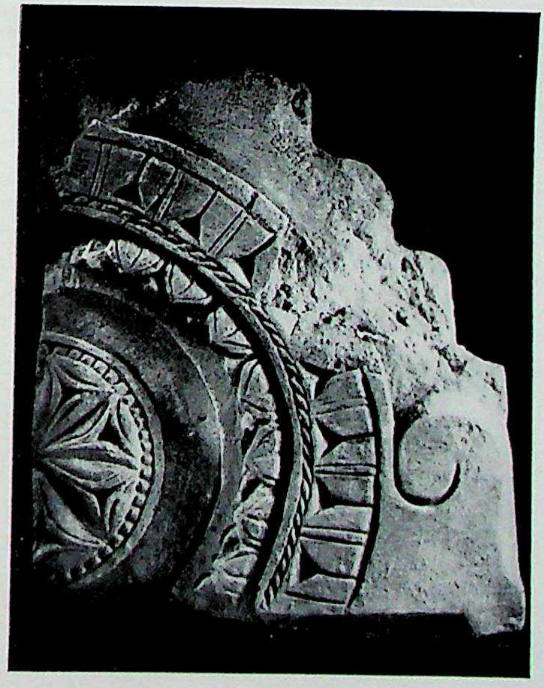
A. Decorated arch with central medallion.



B. Decorated arch.

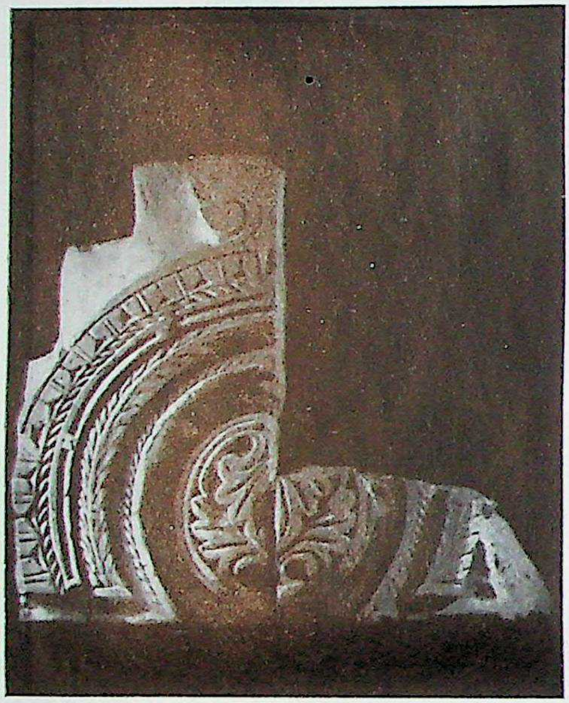


C. Decorated arch with central medallion.

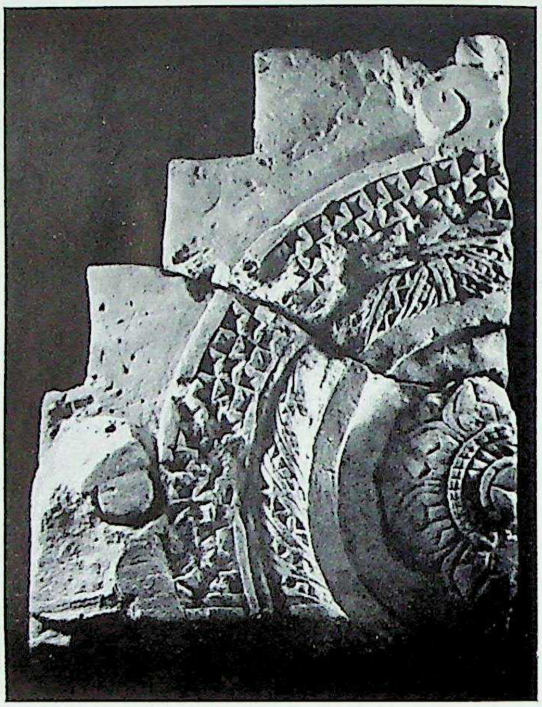


D. Decorated arch with central medallion.

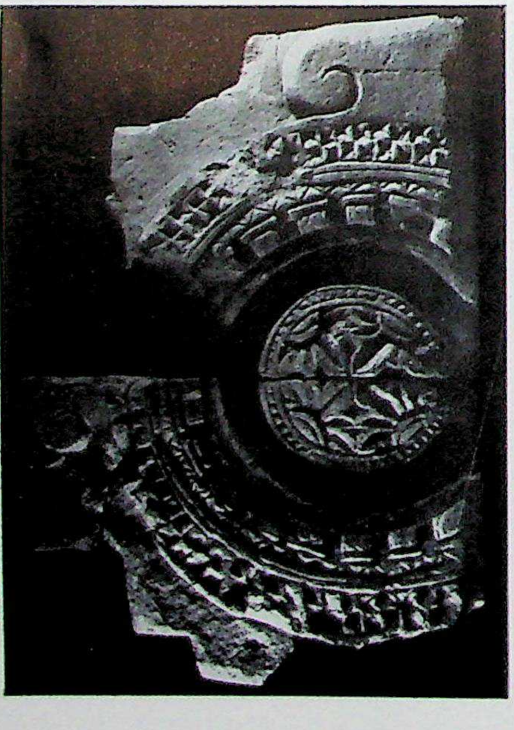
PLATE LIII



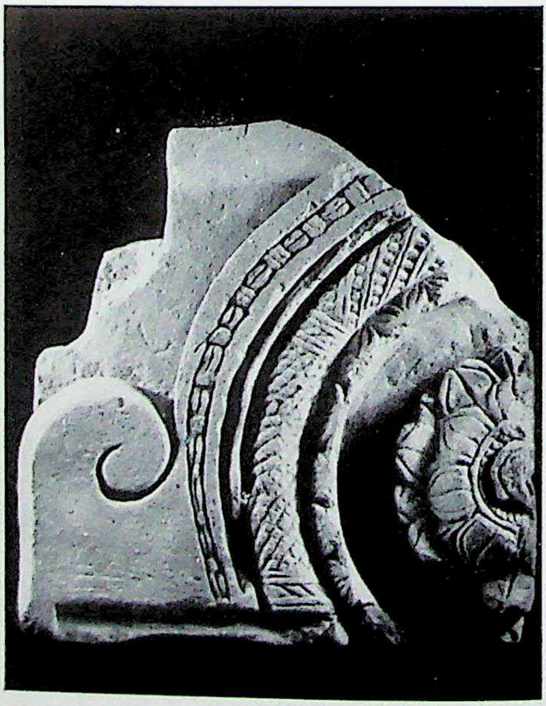
A. Decorated arch with central medallion.



B. Decorated arch with central medallion.

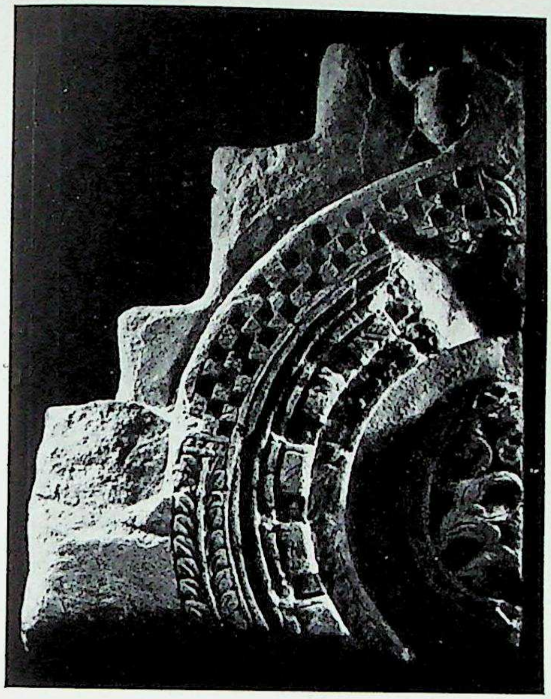


C. Decorated arch with central medallion.

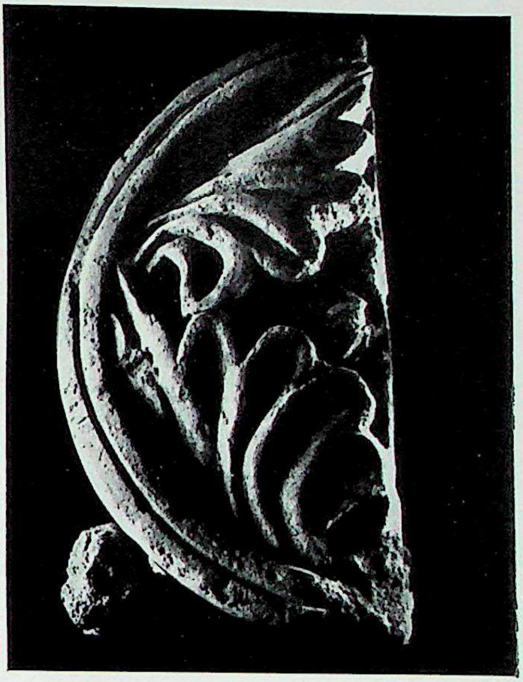


D. Decorated arch with central medallion.

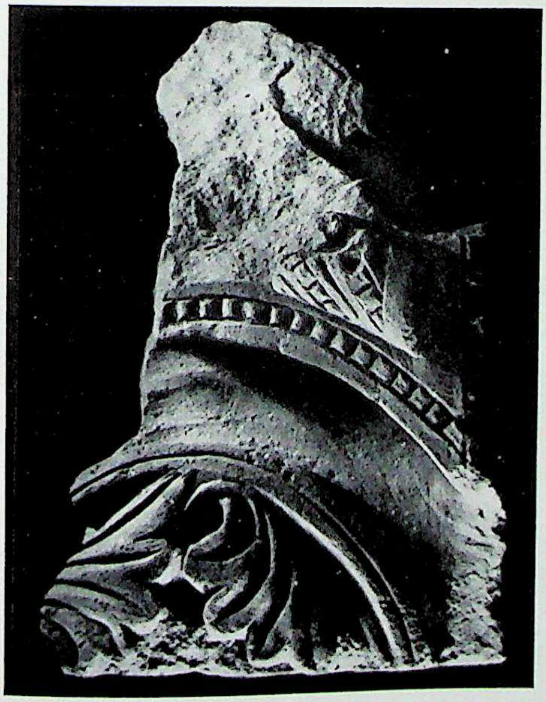
PLATE LIV



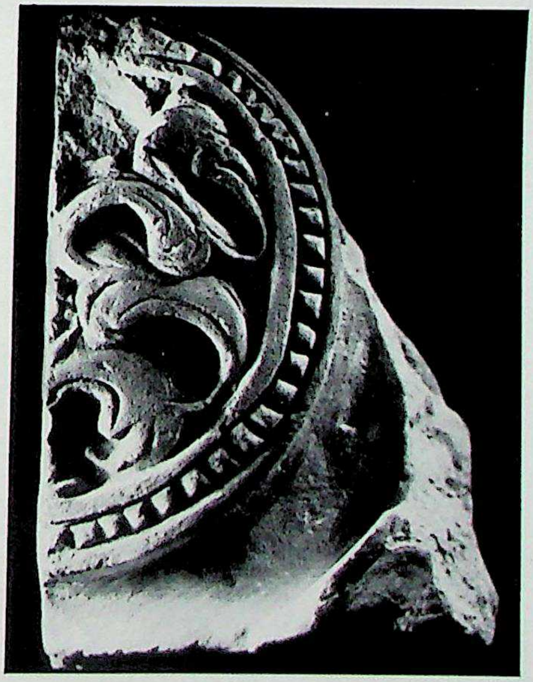
A Decorated arch with central medallion



B Central medallion of an arch

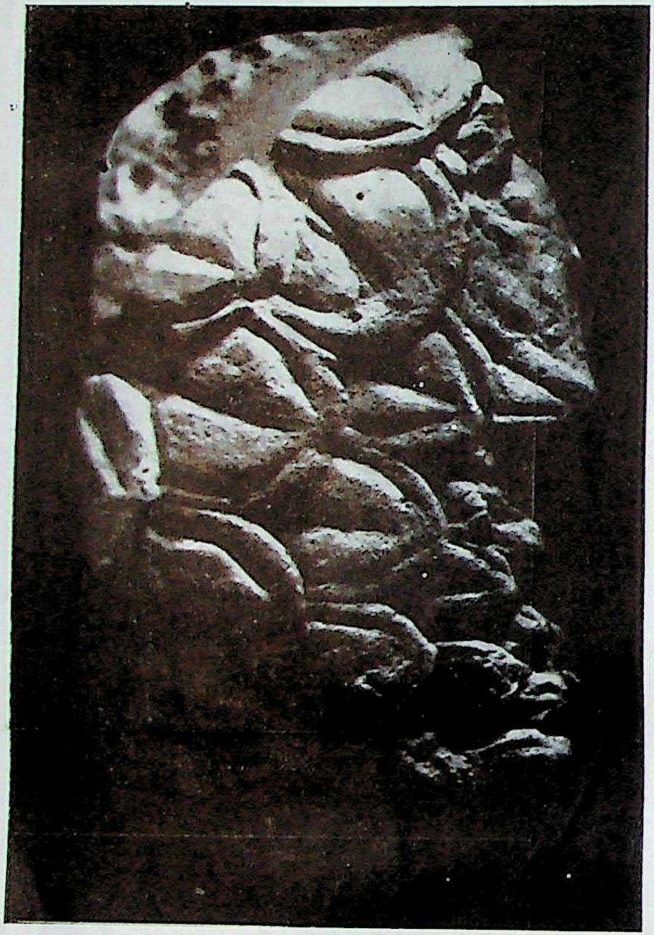


C Central medallion of an arch

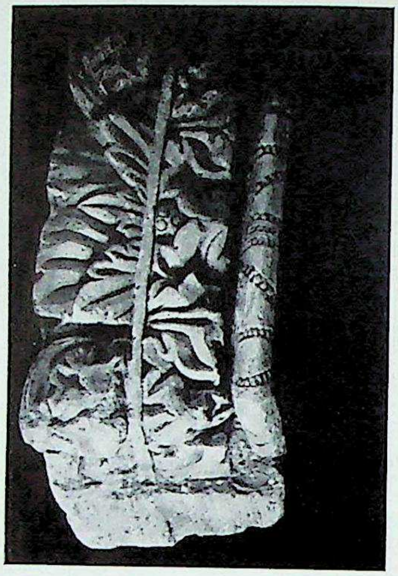


D Central medallion of an arch

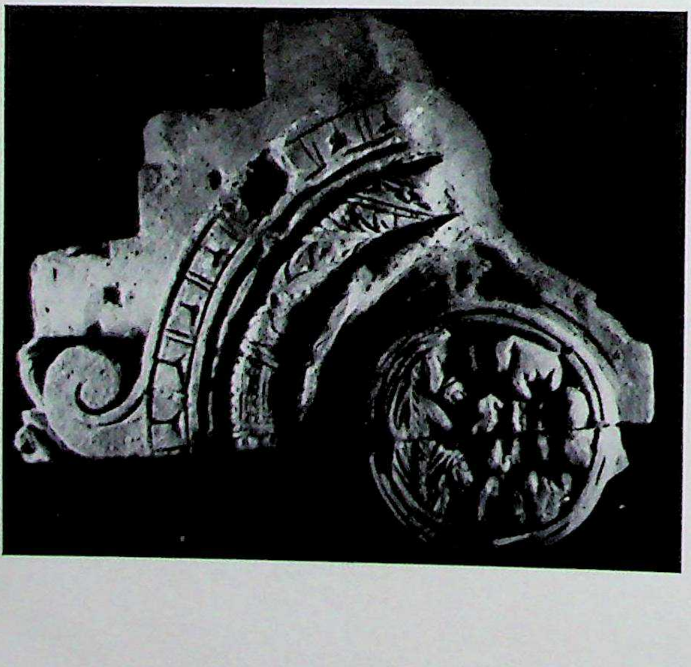
PLATE LV



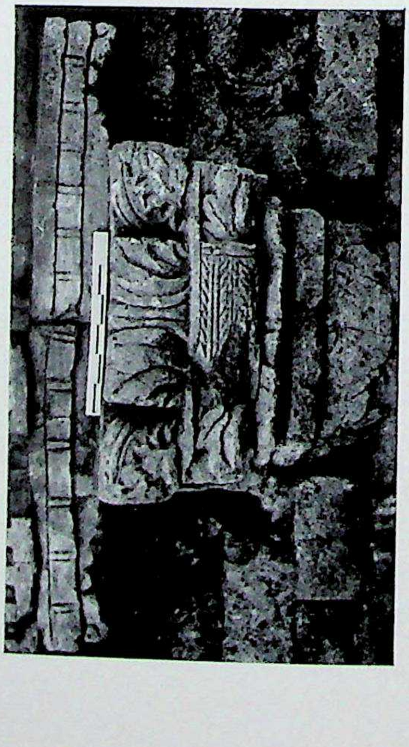
D. Large medallion



C. Indo-corinthian capital

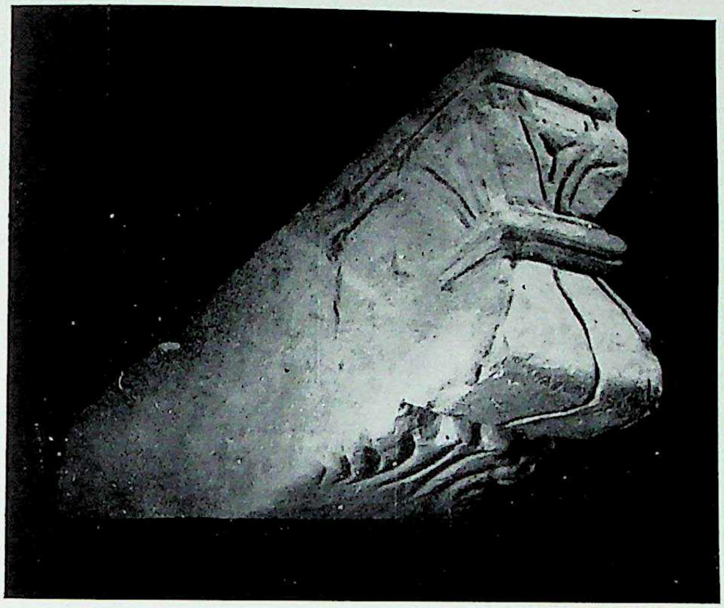


A. Decorated arch with central medallion.

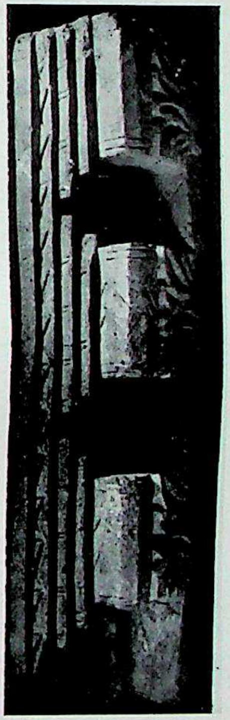


B. Indo-corinthian capital.

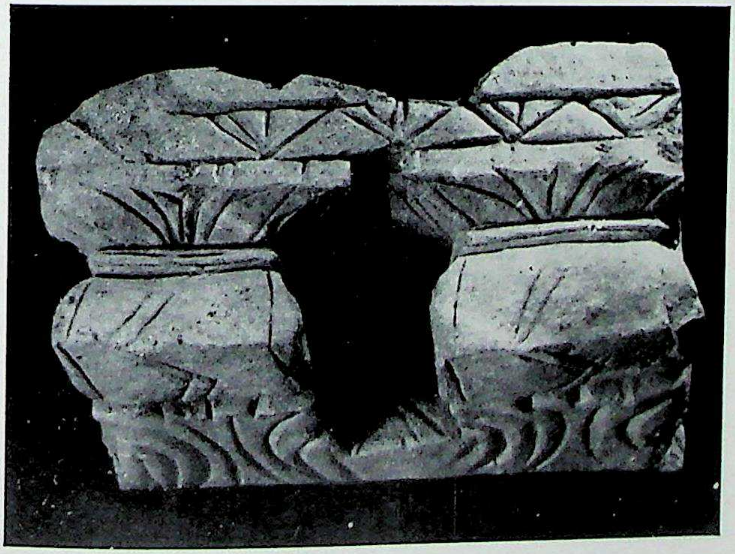
PLATE LVII



A. Single dentil

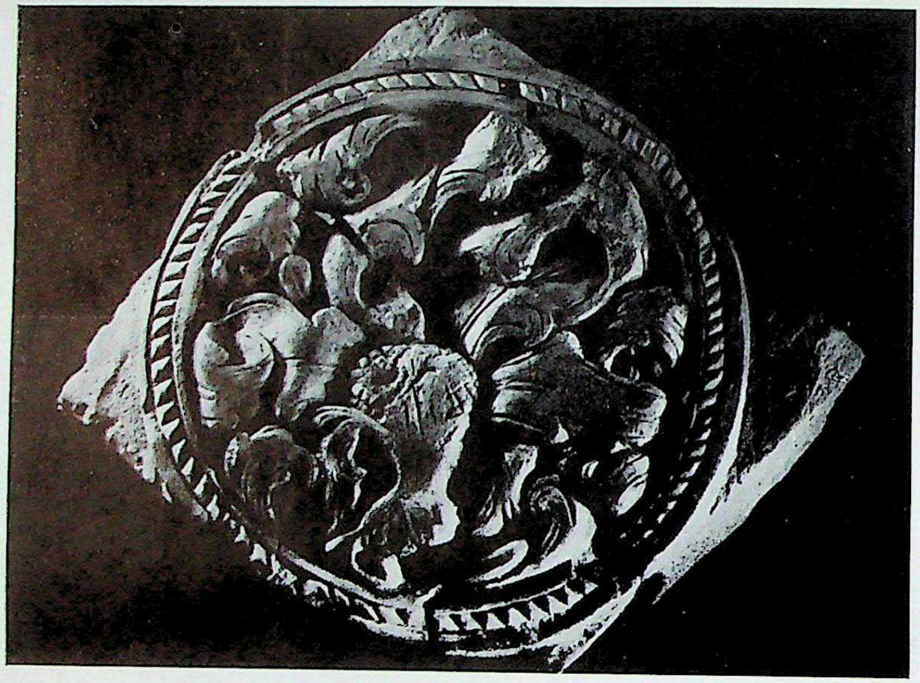


C. Triple dentil

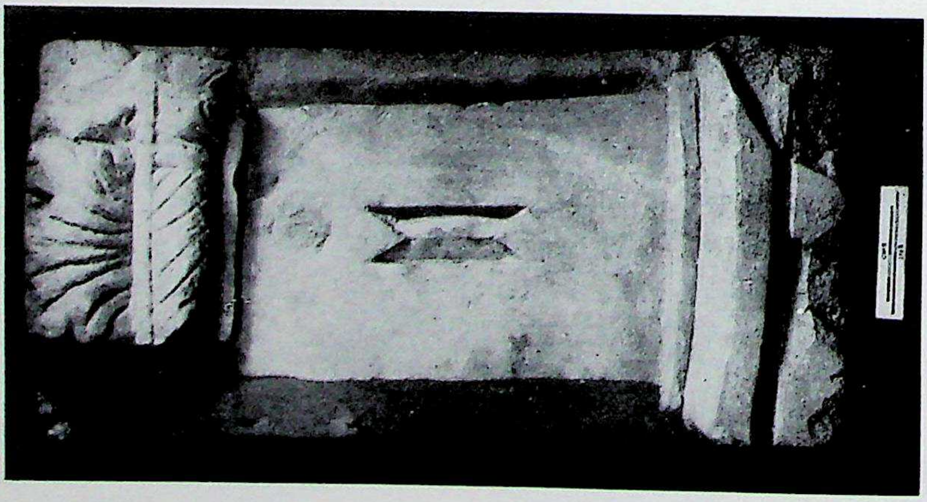


B. Double dentil

PLATE LVI

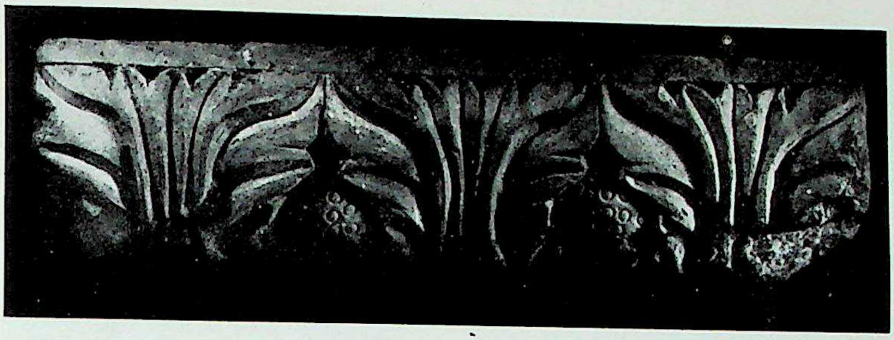


A Large medallion

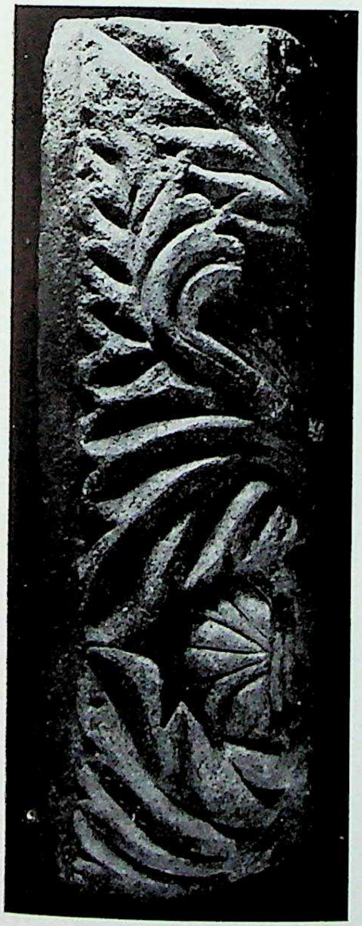


B Decorated Pilaster

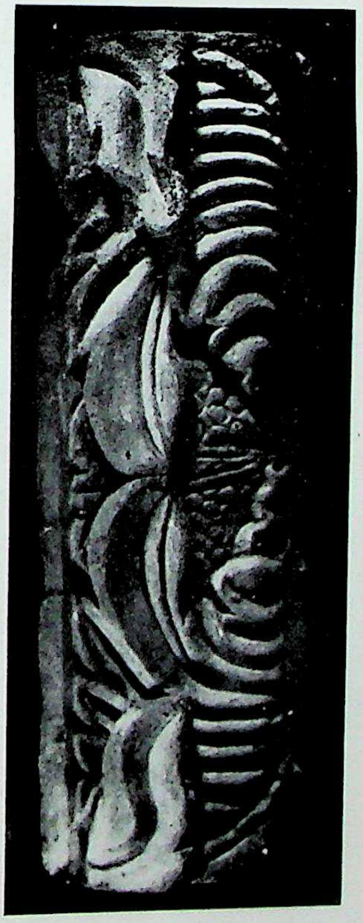
PLATE LVIII



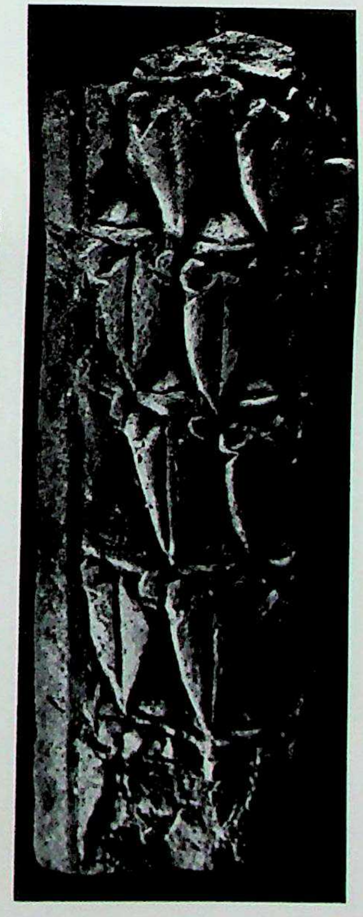
A. Rectangular brick, acanthus decoration.



B. Rectangular brick, acanthus decoration

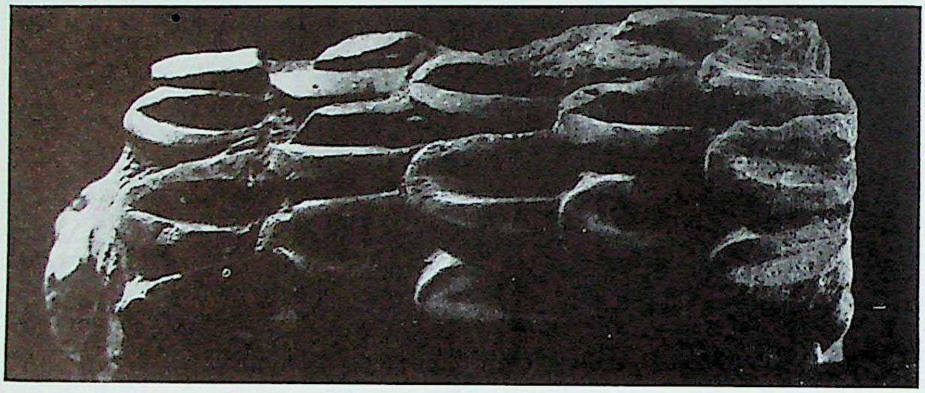


C. Rectangular brick, acanthus decoration

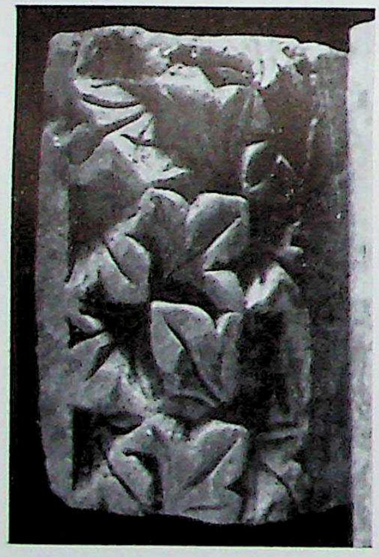


D. Rectangular brick, olive decoration

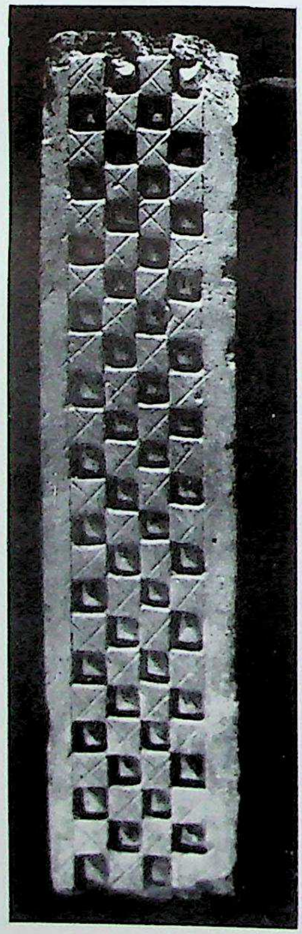
PLATE LIX



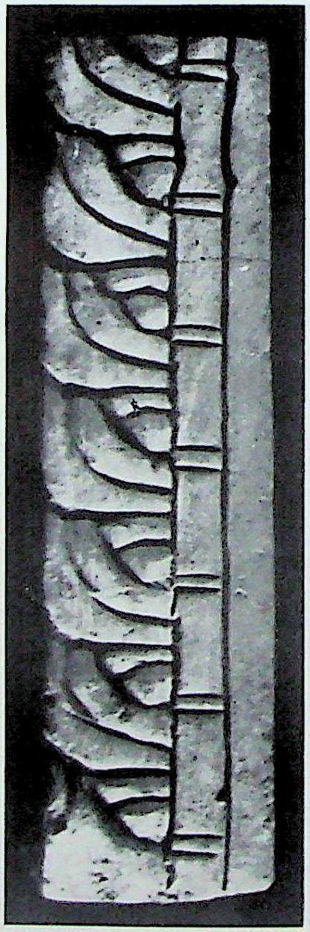
A. Rectangular brick, olive decoration



B. Rectangular brick, acanthus decoration

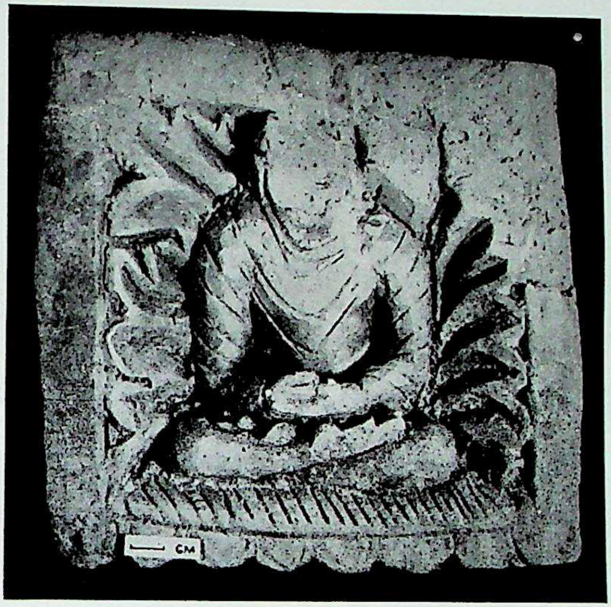


C. Rectangular brick, decoration of squares

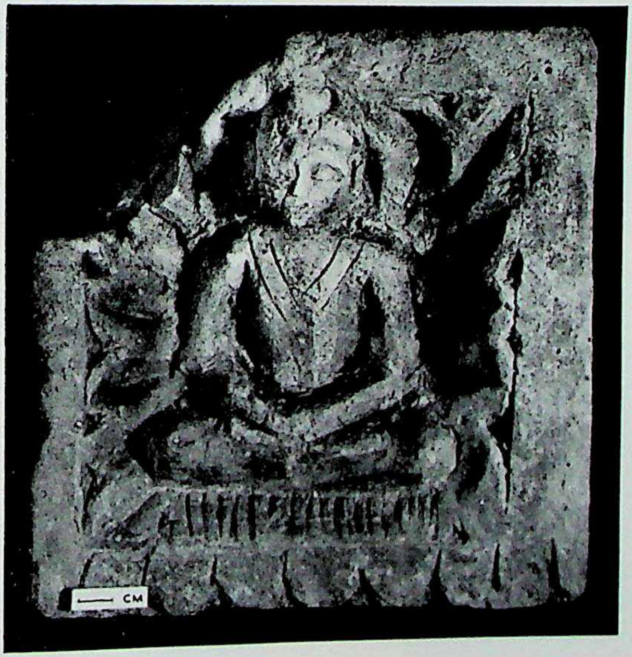


D. Rectangular brick, decoration of loops

PLATE LX

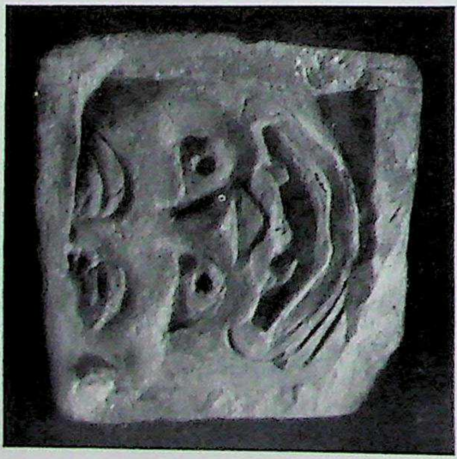


A. Square brick, Buddha figure (inside the Mahastupa)

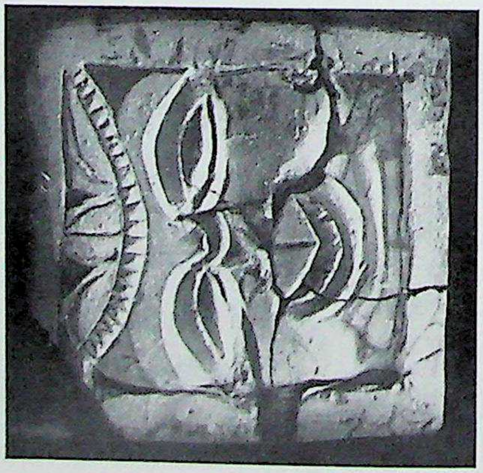


B. Square brick, Buddha figure (inside the Mahastupa)

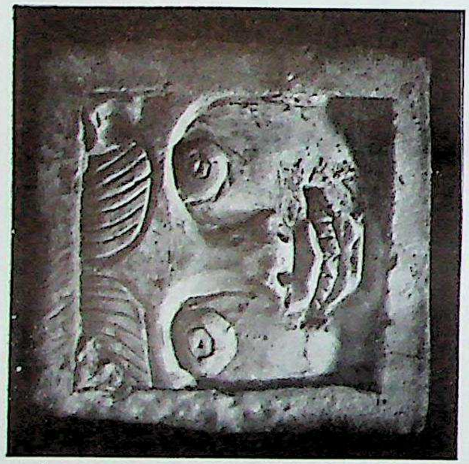
PLATE LXI



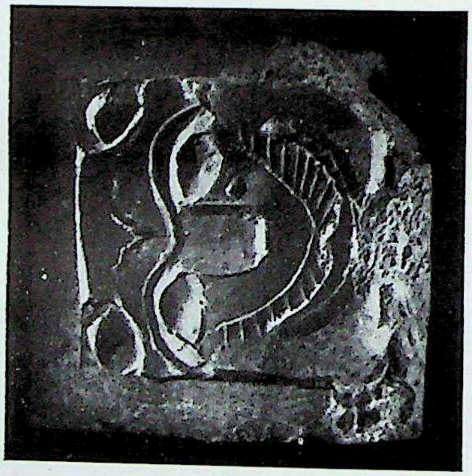
A. Square brick, grotesque face



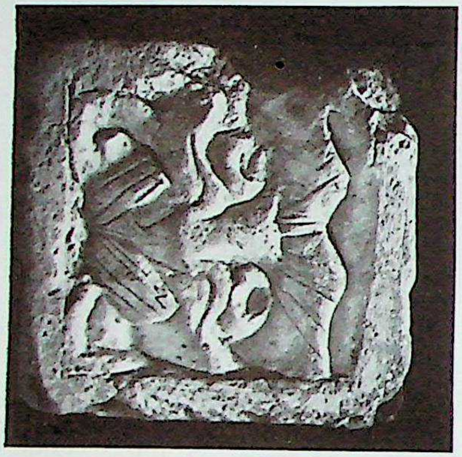
B. Square brick, grotesque face



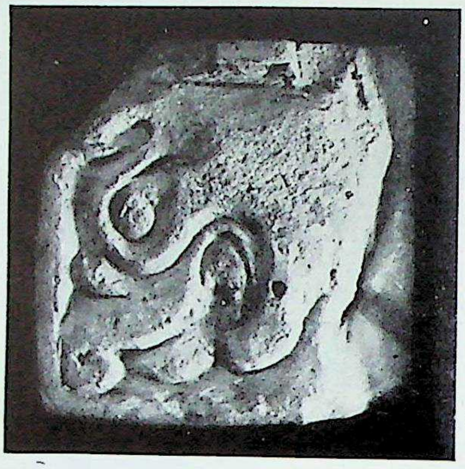
C. Square brick, grotesque face



D. Square brick, animal face

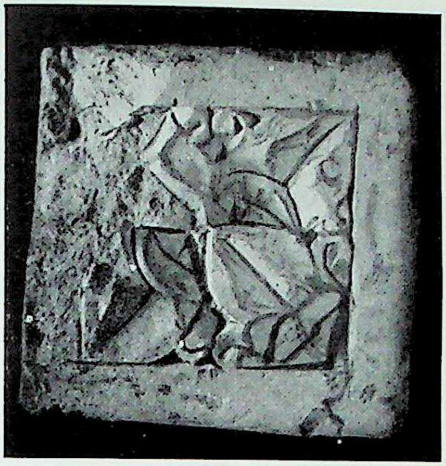


E. Square brick, animal face

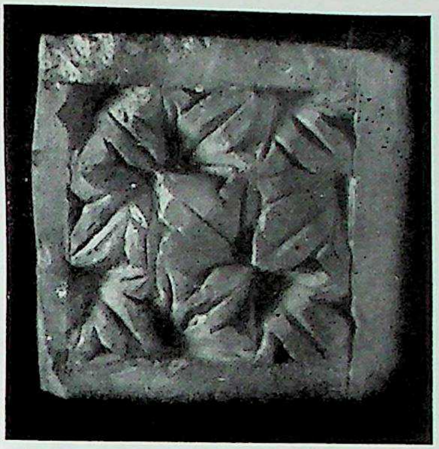


F. Square brick, animal face

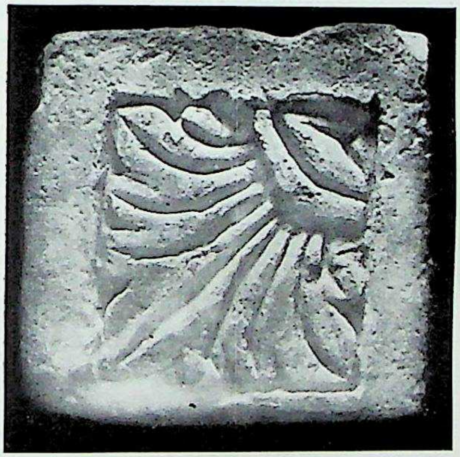
PLATE LXII



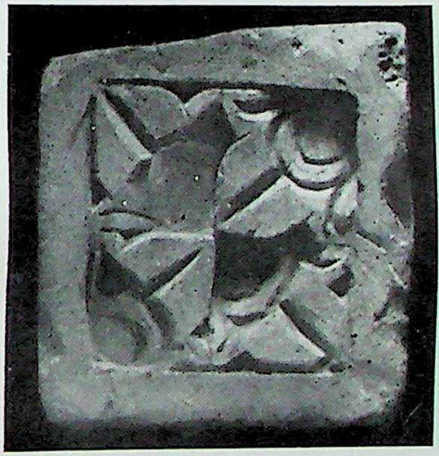
E. Square brick, acanthus



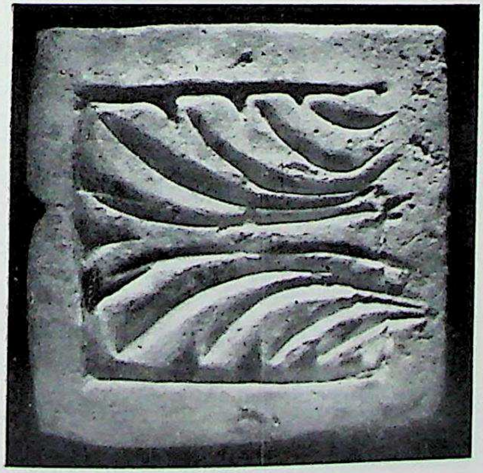
F. Square brick, acanthus



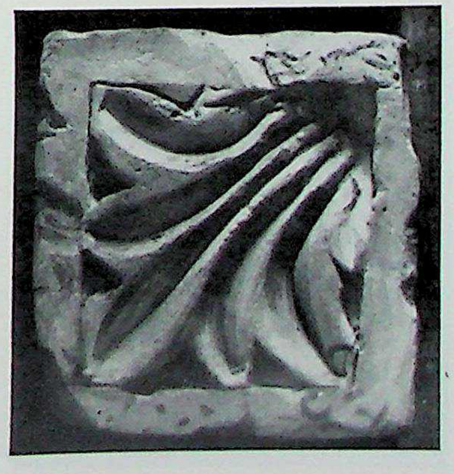
C. Square brick, acanthus



D. Square brick, acanthus

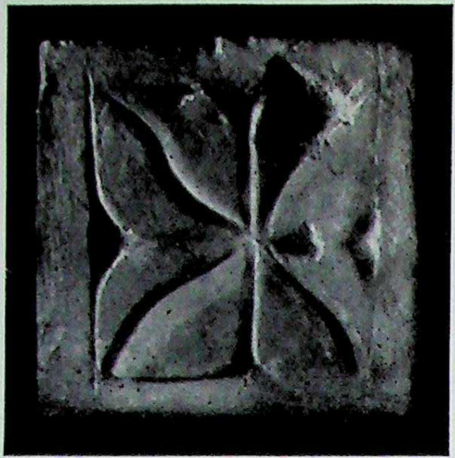


A. Square brick, acanthus

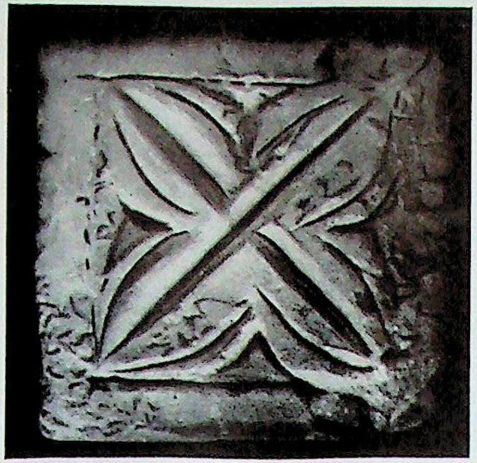


B. Square brick, acanthus

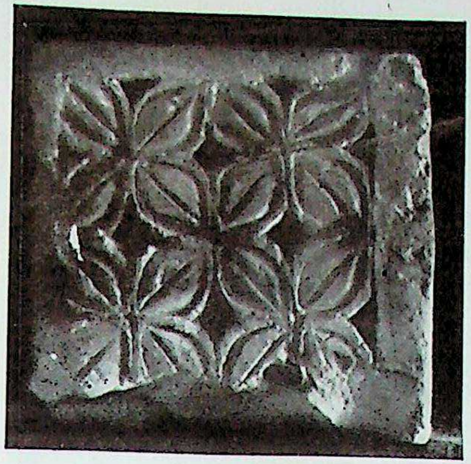
PLATE LXIII



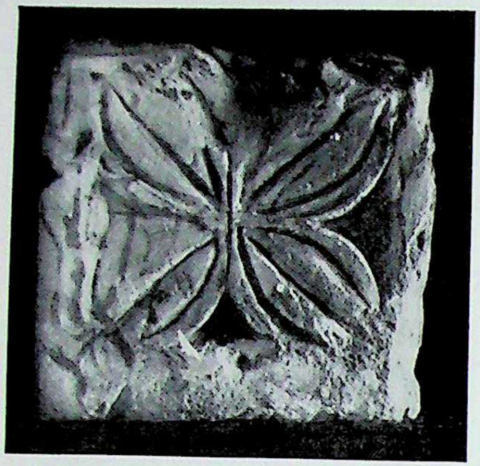
A. Square brick, four petalled flowers



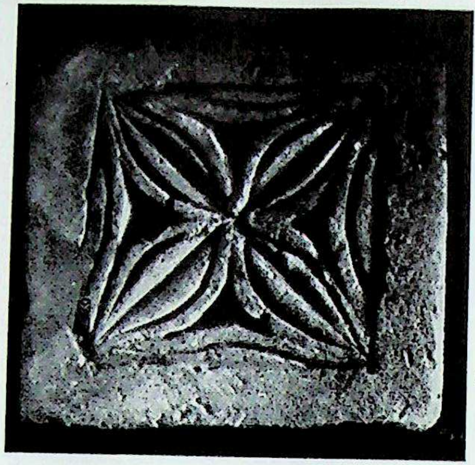
C. Square brick, four petalled flowers



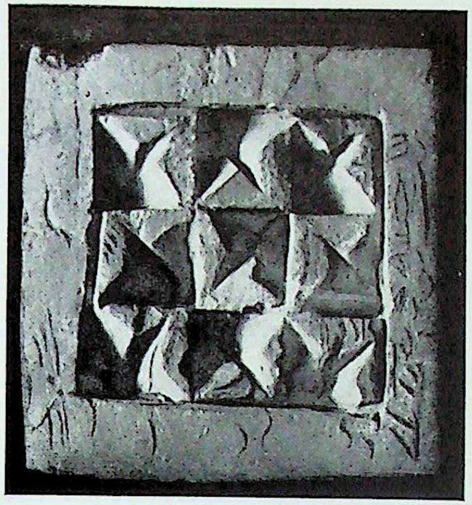
E. Square brick, four petalled flowers



B. Square brick, four petalled flowers

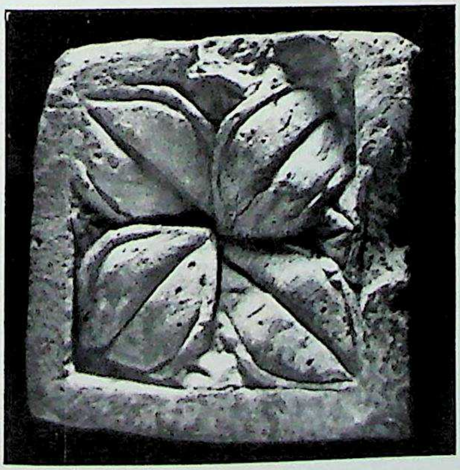


D. Square brick, four petalled flowers

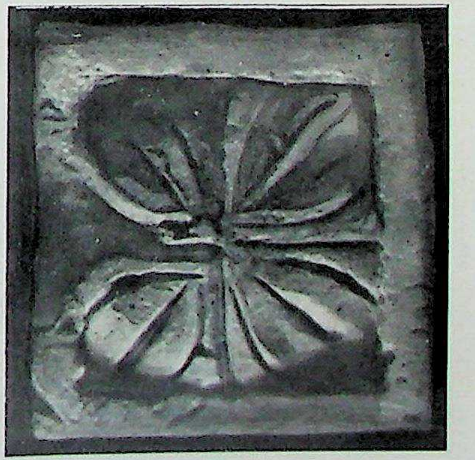


F. Square brick, square design

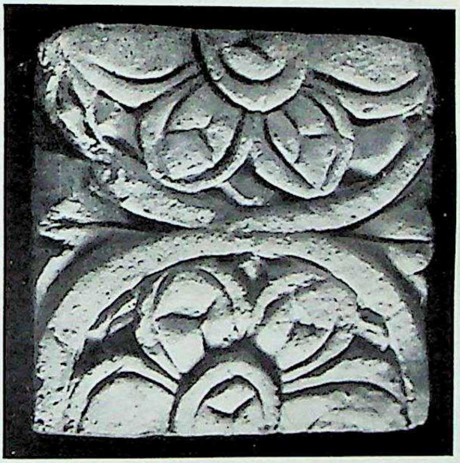
PLATE LXIV



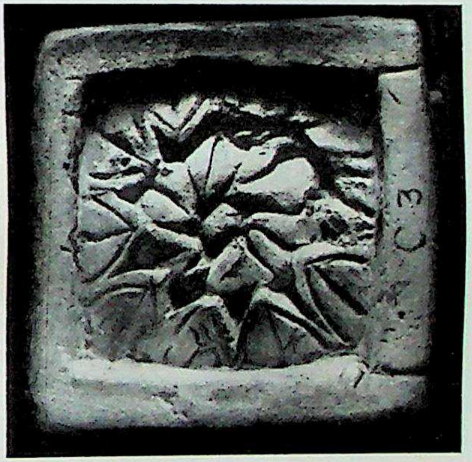
A. Square brick, four petalled flowers



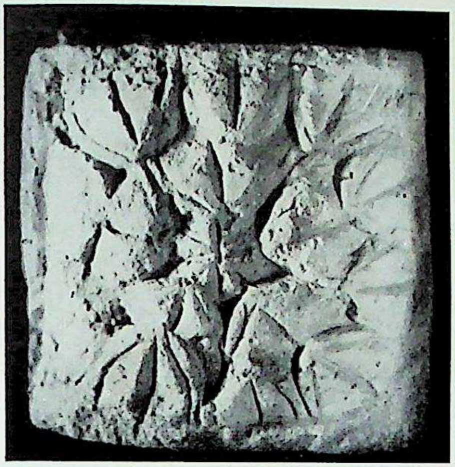
B. Square brick, four petalled flowers



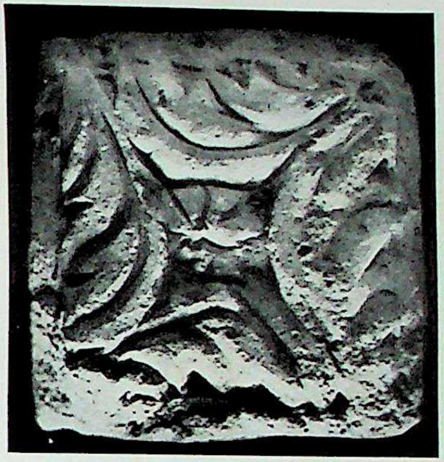
C. Square brick, lotus motif



D. Square brick, lotus motif (?)

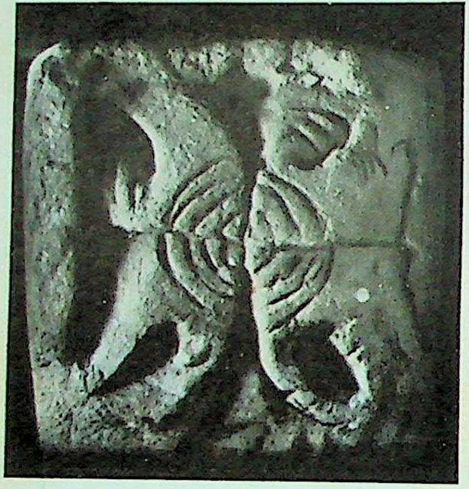


E. Square brick, lotus motif

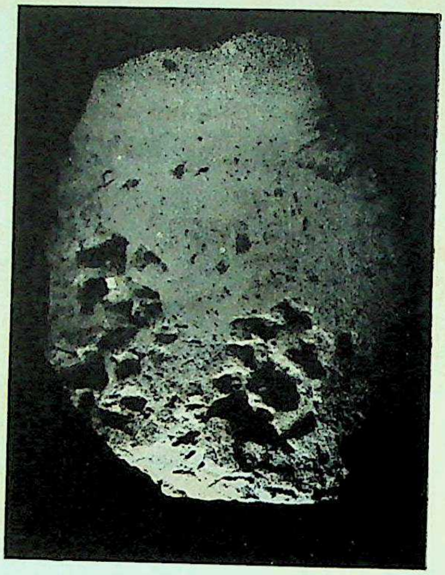


F. Square brick, acanthus motif

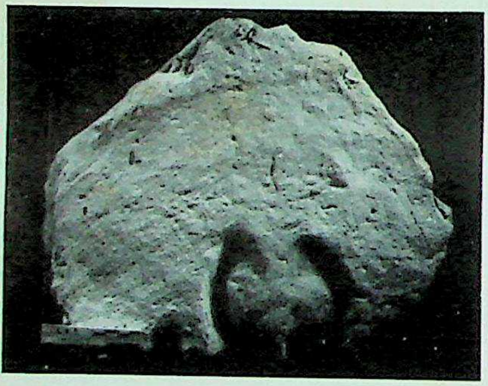
PLATE LXV



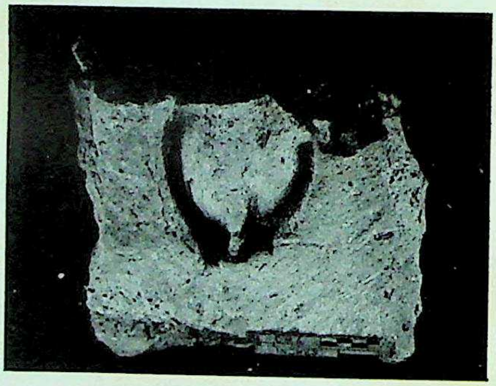
A. Square brick, conch-design



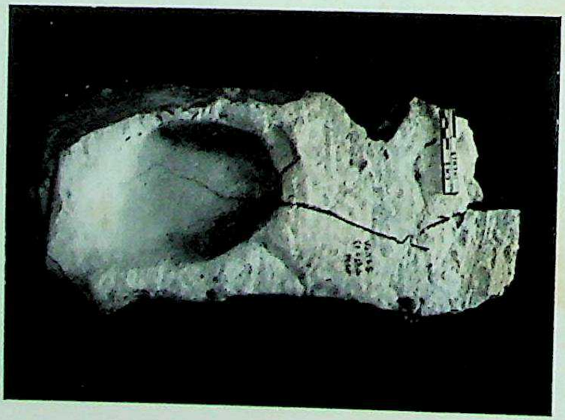
B. A brick with marks of dog's paws



C. Brick with a mark of a calf's hoof.



D. Brick with a mark of a calf's hoof



E. Brick with a mark of human-heel

(1) By incised lines (Pl. XXXIX) (2) By ribbed lines. (Pl. XXXVII).

These lines were drawn with some sharp instrument when the images were damp. They run in smooth gentle curves following the form of the body. Most of them which are on torso and hands emerge from behind the image and drop sharply in loopes and again rise sharply and disappear behind the image. The lines on the legs are oblique.

The method of incised lines can be divided into two techniques:

(a) single line, (Pl. XXXIX, C & D) (b) paired lines. (Pl. XXXIX A & B, Pl. XXXVIII, B & D).

The ribbed lines can be divided into three types (a) Flat low rib (Pl. XXXVIII A) (b) Prominent rib (Pl.XXXVII B) (c) Prominent rib with an incised groove along its run (Pl. XXXVII A).

The flat rib group is having almost flat lines about ¾" inches wide. There are two images in this type. The prominent rib group has a prominent rib having a triangular section. This group includes two images. The C group has only one specimen. In this type the rib is incised at its top all along its run.

Classification according to decoration of cushion seats

All the images are seated on cushion seats 2" to 3" thick. The front and flanks of these cushions are decorated with lotus petals in prominent relief. On each seat there are nine to twelve main vertical petals arranged in horizontal bands. The gap between triangular tips near top is filled with smaller tips in background. This overlapping creates an impression of a full corolla. The size of petals differ according to their numbers. Bigger the size of petals smaller is the number. Considering various types of decoration, these seats can be classified into two main groups:

(1) Having bands of single petals, (2) Having bands of double petals.

Having bands of single petal (Pl. XXXIX B & Pl. XXXVIII A, B, C, D).

This group can be subdivided into two sub-groups:

A. Having petal tips pointing up.

B. Having petal tips pointing down.

Group A gives an impression of a full bloomed lotus, thus creating an impression as if Buddha is seated on a lotus. Group B seems to be just a change in position probably due to sculptor's fancy.

(2) *Having bands of double petals* (Pl. XXXVII A & C.)

In this type the cushions are thicker (3½″) than type I. The petals of lower band are pointing downward while those of upper band pointing up. Thus, this type produces a calyx of a complete full bloomed lotus. In some instances, the upper row of petals is arranged in typical formation in which the front row of petals is composed of full petals while the gap between the tips of petals is filled with double tips. This arrangement of overlapping petals gives an impression of triple-petalled calyx.

*Classification according to Urna**

As Buddha is represented as a yogi in *Dhyanamudra* this feature has been added to some images.

It is represented by a prominent tiny hemispherical knobble between eyebrows just above the nose (Pl. XXXIX C, Pl. XXXVIII B & D).

In all seven images have this sign positively. Five images have no trace of this sign at all. No data could be collected from other fourteen images as either their heads were missing or this feature is obliterated.

The details of the images are tabulated below:

Buddha Images

Table showing details of drapery, face, hair-style, cushion seat and *Urna*

Sr. No.	*Style of drapery*	*Face*	*Cushion Seat*	*Urna*	*Remarks*
1.	Both shoulders Single incised lines	Oval	Single petal pointing down	Yes but broken	Almost intact piece. Some patches added for finish.
2.	One shoulder Single incised lines	Oval	Single petal pointing down	Yes but broken	Hands right leg and right foot missing.
3.	One shoulder Single incised lines	Oval	Single petal pointing down	Worn out	Face worn out but features are still visible.
4.	One shoulder Single incised lines		Single petal pointing down	Not there	Right hand part of left hand and parts of left leg missing.

---

* A tiny tuft of hair between eyebrows, a sign of great yogi.

Sr. No.	*Style of drapery*	*Face*	*Cushion Seat*	*Urna*	*Remarks*
5.	Both shoulders Single incised lines	—	Single petal pointing down	—	Face worn out, lower torso hands and legs are missing.
6.	One shoulder Single incised lines	—	Single petal pointing down	—	Found from the Stupa. Head is missing.
7.	One shoulder Single incised lines	—	Single petal pointing down	—	Broken to pieces. Head missing.
8.	Both shoulders Single incised lines	—	Triple petals pointing up	—	Head missing, hands and legs loose but intact.
9.	One shoulder Single incised lines	Round	Triple petals pointing up	Yes but broken	Hands missing, parts of arms repaired.
10.	Both shoulders Incised double lines	—	Single petal pointing down	Yes	Right hand, part of left hand and parts of left foot broken.
11.	Both shoulders Incised double lines	—	Single petal pointing down	Yes	Almost intact image except part of its right shoulder.
12.	One shoulder Incised double lines	—	Single petal pointing down	—	Face worn out, lower torso, legs and hands damaged.
13.	Both shoulders Incised double lines	—	Single petal pointing down	—	Much damaged.
14.	Both shoulders Incised double lines	Round	Double petals one row of tripal petals pointing up. Other row or single petals pointing down	—	Hairstyle—Wavy.
15.	Shoulders damaged Incised double lines	—	Triple petals pointing up	—	A very rich decoration of lotus petals to depict a corolla of lotus. It has ten main petals and 27 petal tips behind main line. Head and hands missing. Broken from torso.
16.	Shoulders damaged Incised double lines	—	Single petal pointing down	—	Only leg portions are intact—other parts missing:
17.	Both shoulders Incised double lines	—	Single petal pointing down	—	Head and hands missing.
18.	Both shoulders Incised double lines	—	Single petal pointing down	—	In fragments—fragments of legs, shoulder and torso.

Sr. No.	*Style of drapery*	*Face*	*Cushion Seat*	*Urna*	*Remarks*
19.	—	—	Single petal pointing down	—	Only legs and left hand intact.
20.	—	—	Single petal pointing down	—	Only legs and part of left hand intact.
21.	One shoulder Incised double lines	—	Single petal pointing down	—	Head, one hand and leg are missing.
22.	Both shoulders Ribbed single lines	Round	Single petal pointing down	No	Hands and parts of feet are missing.
23.	One shoulder Ribbed single lines	Round	Single petal pointing down	No	Almost intact image. Parts of hands, feet and right shoulder repaired.
24.	Both shoulders Prominently ribbed lines	—	Double petals in 2 row, upper row pointing up and lower one pointing down	Yes	Belly, right hand and right leg damaged.
25.	Both shoulders Prominently ribbed lines	Round	Single petals pointed down	—	Broken but can be repaired fully except the face.
26.	Both shoulders Incised Prominently ribbed lines	Oval	Double row; upper row pointing up and the lower row pointing down	No	Nose repaired. Hands and belly repaired

Decorative pieces

This group forms the backbone of the decorative traditions of Devnimori. It is the biggest group also as it includes about a dozen varieties of decorative pieces which are classified into following groups:

(1) Arches
(2) Capitals of pilasters
(3) Medallions
(4) Pilasters
(5) Bases of pilasters
(6) Dentils or brackets.

All these pieces are actually the components of decorative architectural features (In addition to cornices, moulds and fillet bands). Most of them can be called one piece terracottas. Only the arches—being bigger (4′-1″ to 4′-2″ × 4′-0″ and 3′-2″ × 1′-7″)—had to be cut into convenient parts when they were damp and again assembled together on the structure itself as one piece decoration.

Arches

According to form, arches can be classified into two groups:

(A) Semi-circular stilted arches, (B) Chaitya arches.

Semi-circular stilted arches (Pl. XLIII, XLIV, XLV, XLVI)

Height 4′-1″ to 4′-2″ W. 3′-10″ to 4′-0″.

As suggested by its name itself the top part of this arch is semi-circular in shape. At base its side jambs end abruptly without any formative feature.

This arch can be divided into two main parts: The arch proper and side jambs. The top semi-circular arch is composed of two parts: the vault and two side volutes which flank it. The side jambs are composed of two parts: (a) top portion having roughly bell-shaped base with surmounting animal figures, (b) the shaft-like jambs.

As already noted in the beginning of this chapter these arches were fabricated in several parts which fit with each other exactly to form the complete arch.

The decorative scheme of this arch is composed of fillet bands and moulds which are executed by incised, carved and moulded designs. The formative features such as animals and bell-shaped concave-surfaced moulds are executed in relief.

The decoration of this arch is composed of four components:

(A) Architectural features in relief
(B) Bands of sculptures in *ulto rellevo*
(C) Rounded moulding
(D) Fillet bands

(A) *Architectural features in relief*

This includes the capital-like feature of the arch which is just under the side volutes of the top arch and surmount the side jambs.

This feature can be divided into four main parts:

(a) Bell-shaped base (Pl. XLVI B, D).

(b) Horizontal ledges and recesses (Pl. XLVI B, D).

(c) Lion figures in relief (Pl. XLVI D).

(d) Floral background of the lion-figure (Pl. XLVI D)

(a) The bellshaped base is rendered in relief. Its surface is concave in section. It is decorated with two inverted acanthus leaves.

(b) Ledges and recesses are meant for separating the bellshaped capital and the animal figure.

(c) The lion-figures (5″×5½″) seated on haunches surmount the band of ledges and recesses. These lion figures are executed in *ulto relievo* in a profile pose so as to face sideward. Actually these lion-figures are depicted on the junction of semi-circular arch and side jambs. As these figures are comparatively smaller only their forms and basic features such as typical head, broad jaws, powerful thighs and legs, mane and tail are represented.

Most of these lion figures are highly damaged. But inspite of that, their postures as well as features are clear cut and powerful. The open jaws, the fully stretched forelegs, haunches and supple but powerful body convey the strength and natural beauty of the animal. The tail raised up in a curl is also well balanced with the form of main body.

The whole figure is displayed against a background of acanthus leaf. The oblique lines of acanthus leaves serve as a contrast to the diagonal display of this animal figure.

(C) *Rounded Moulding*

This rounded moulding is 2½″ broad and runs all along the arch along its inner border. It is decorated with ribbed lines produced by incised lines. The whole mould is decorated with alternating triangles which are hatched with oblique lines. The oblique lines of each triangle are at right angle to its adjoining triangle. This arrangement relieves the monotony of the mould as a whole.

(D) *Fillet Bands*

These bands run all along the arch. They are executed in prominent and deep incised lines. They are composed of floral as well as geometric motifs. Though they are in incised lines their effect is like relief work.

There are three bands:

- (A) Running along the inner border.
- (B) Running along the central line.
- (C) Confined to the outer chamfered edge of jamb just below the bellshaped capital.

(a) A 1¼" broad band runs all along the inner border of the arch. It is generally composed of squares and circles or petals in pairs in their various compositions executed by incised lines.

(b) The main band which runs all along the central line of the arch is 2" broad and is composed of various compositions of floral as well as geometric designs and sometimes even a blending of both. This band is the main decorative feature of the arch. To give it prominence it is separated from the inner edge band by means of the above mentioned rounded mould.

(c) A rectangular-decoration-like band is confined to the base portion of jambs where their angular edge is chamfered. It covers the area between the bell-shaped capital and the base (13½" × 8¼"). Like the other two bands mentioned above this band is also decorated with geometric or floral motifs.

Details of the varities of these arches are analysed in the following table:

Semicircular stilted Arches

Sr. No.	*Inner border band*	*Mould*	*Central band*	*Remarks*
1.	Oblique petals	Garland of ribbed lines dotted and continuous	—	—
2.	Oblique petals bordered on both sides by half petals	Garland of ribbed lines-dotted and continuous	—	—
3.	Chequer pattern, diagonally half carved squares, three rows	Three faced angular, decorated with geometric composition of petals, produced by bisecting circles	—	—

Sr. No.	*Inner border band*	*Mould*	*Central band*	*Remarks*
4.	Chequer pattern, diagonally half carved squares, two rows	Garland of geometric composition of alternating triangles, filled with ribbed dotted lines, separated by bands of zigzag lines.	—	—
5.	Composite decoration of chequer pattern of obliquely cut squares and acanthus leaf	Composite decoration of triangles filled with petals, separating band of zigzag lines	—	—
6.	Composite band of obliquely sprouting acanthus leaf in square and four petalled geometric design in square	Oblique and horizontal bands of straight (dotted as well as plain) and zigzag lines	—	—
7.	Oblique petals	Dotted and plain lines in oblique alignments	Chequered band of three rows. Chequered composition of diagonally half carved squares	Separating band of bead and reel motif.
8.	Composite band of geometric decorations of diagonally half carved squares and acanthus leaves	Composite mould of geometric and floral motif. it is a horizontal band of geometric design of petals composed by bisecting circles and circles and oblique lines (dotted as well as plain)	—	—
9.	Composite band of chequer pattern and acanthus leaves	Composite chequer pattern composed of mould, diagonally half carved squares pattern and oblique lines (dotted and plain)	—	—
10.	—	—	Geometric composition of petals produced by bisecting circles	Portion under capital decorated with loops of garland and tessals at top. The lower bellshaped portion is

Sr. No.	*Inner border band*	*Mould*	*Central band*	*Remarks*
				decorated with overlapped lotus petals.
11.	Geometric composition	—	Floral composition	Chamfered angled portion under capital. It is decorated with wedge-shaped motif and horizontal band of olive stalk.
12.	—	—	Geometric composition of squares with diagonal leaf	Main decorative motif is the vase-like *Ghatpallava* motif with Trident-like leaves sprouting from it. Probably symbolizing *Triratna* symbol. Decoration of garland and tessals is damaged.
13.	Oblique petals	Plain and dotted lines	Chequer pattern of four rows, composed of obliquely half carved squares, bordered by a vertical band of bead and reel motif	The rounded outer angle which was probably part of the chamfered angle under capital is decorated with squares filled with four petalled geometric composition.
14.	Oblique petals	Plain oblique and dotted oblique lines	Geometric band of squares, each filled with oblique petals	The rounded outer angle which was probably part of the chamfered angle under capital is decorated with chequered pattern composed of diagonally half carved squares.
15.	Geometric composition	—	—	Chamfered angled portion under capital. It is decorated with wedgeshaped motif and horizontal band of olive stalk.

Chaitya arches

Chaitya arches form the most important feature of the stupa and as such they are fretted with various decorations which at once attract attention. Moreover they were employed for surmounting the Buddha images. Although their basic form is the same, these arches can be divided into two sub-groups:

(1) Having wedgeshaped-undercut. (2) Having central medallion.

(1) Arches with wedge-shaped undercut (Pl. XLVII, XLVIIJ, XLIX)

H. 1′-7″ B. 3′-2″.

Like semi-circular stilted arches, these arches were also prepared in pieces. But they were prepared in only two equal halves divided vertically.

Chaitya arch can be divided into four parts:

(A) Back-slab
(B) Top volutes
(C) Semi-circular vault
(D) Side volutes

A. Like the Buddha image this arch was also to be studded on the structure face, hence, each arch is having a stepped back-slab with a wedge-shaped undercut which is meant for fitting on the wedge-shaped top of the image. This backslab is about 4″ thick. Its top corners are cut into steps for fitting with the brick work of the stupa structure. This slab is plain outside the segment of the arch but the space flanking the undercut which is within the arch is decorated with various geometric and floral motifs and their compositions.

The form of arch proper which is composed of top volutes, vault and side volutes was in a very prominent vertically cut relief rising about 2½″ to 3″ from the background of the backslab.

B. Top volutes: This part is composed of two volutes turning on two opposite sides. They are plain and devoid of any decoration. Only its sharp angular edge is blunted by scrapping.

C. Semi-circular vault: This is the main part of the arch as it is its main feature where the decorations are confined and due to which these arches have their typical form. It is decorated with two fillet bands of decorations in relief. The inner band is generally a rounded mould decorated with various motifs such as ribbed lines, dots as well as floral string line patterns etc. In some specimens this rounded mould is replaced by some floral motif such as prominent lotus petals jutting out in *ulto-relievo*. But the rounded mould is most common.

The outer band is a flat band decorated by relief work. It is 1¾″ to 2″ broad and runs all along the arch. This band is generally decorated with floral patterns, but sometimes geometric designs are also employed. These bands are separated by prominently marked incised or ribbed lines running parallel to the bands.

D. Side Volutes: These prominent heavy volutes measure 6″ × 7½″ and flank the arch at its base. Proportionately they are heavy. But it seems that they are kept like that to give a stable footing to arch.

Details of these arches are tabulated below:

Chaitya arches with under-cut

Sr. No.	*Main band*	*Decoration on the backslab*	*Remarks*
1.	Double olive leaf	Floral leaves formed by geometric composition of bisecting circles	Top volute broken, only one half of the arch recovered.
2.	Double olive leaf	Floral composition of twists and turns of highly stylised leaves	Top and side volutes are completely missing.
3.	Double olive leaf	Composite design of chequer pattern and acanthus leaf	Top volute, part of backslab and part of decoration within the arch broken. The acanthus leaf decoration is near the base of the arch and the chequer pattern is above it.
4.	Composite band of single olive leaf and bead and reel motif separated by ridged and square dot line	Group of acanthus leaves in diagonal sprouts	Top and side volutes broken.
5.	Composite band single olive leaf motif	—	Only the top volute and half of the main band intact, all other parts completely missing.

Sr. No.	*Main band*	*Decoration on the backslab*	*Remarks*
6.	Composite band of lotus petals pointing inward and bead and reel motif	Acanthus leaf pattern	Lower half of the arch is completely missing.
7.	Composite band of lotus petals pointing outward and bead and reel motif	Missing	The top volute and the decoration within the arch are missing.
8.	Lotus petals pointing inward	Chequer pattern	The side volute, lower half and the decoration on the backslab missing.
9.	Composite pattern of embossed squares and lotus petals pointing outward, their outline is marked with an incised line to produce a rib-like outline	Chequer pattern	Only the side volute and small portion of base with all bands and mould preserved.
10.	Composite band of deformed lotus petals marked with two vertical incised lines and having pointed triangular tips, and single olive leaf pattern	Halves of deformed acanthus leaves arranged in an oblique design composition	—
11.	Composite band of half carved alternate chequers and band of tiny incised circles	Chequer pattern of alternate carved chequers	The top and side volutes broken. The decoration is also much worn out.
12.	Chequer pattern of diagonally half carved chequers	Chequer pattern of alternate carved square and plain square	The top and side volutes are broken. The whole piece is in three fragments.
13.	Chequer pattern of obliquely half carved squares	Composition of acanthus leaves. One central leaf is depicted perpendicular to the oblique line of the undercut. The flanking halves of leaves are depicted one pointing toward top while other near the base towards base	The top volute is missing and the side volute is worn out.
14.	Composite band of acanthus leaves pointing outward and the bead and reel motif	Chequer pattern of alternate carved out squares	The top portion with volute, side portion with volute and base are missing.

Sr. No.	*Main band*	*Decoration of the backslab*	*Remarks*
15.	Groups of two acanthus leaves. One group of sprouts pointing outward, the second one has acanthus leaves having diagonal sprouts opposite each other	Three acanthus leaves. The central leaf at right-angle to the undercut and two flanking leaves at diagonal alignment	The top and side volutes are missing.
16.	Acanthus leaves sprouting outward	Chequer pattern with obliquely half carved squares	Top and side volutes broken.
17.	Acanthus leaves separated by dotted line flanked by ribbed lines	Chequer pattern with alternate carved squares	Only top portion of the arch preserved, the lower part along with side volutes completely missing.
18.	Composite design of half carved squares and geometric design of floral petals	Broken	Only small top portion of the arch is intact. The top volute and the base with the side volute is missing.
19.	Geometric composition of floral leaves	Plain	This is the only specimen having completely plain backslab devoid of any decoration.
20.	Geometric composition of floral petals composed by bisecting circles	Chequer pattern with half carved squares	Rounded mould of lotus petals pointing inward. Only base portion with side volute is intact.
21.	Floral composition of a serpentine creeper of undulating form	Composite decoration of acanthus leaf and half carved squares in three separated parts	Top portion and side portion completely missing.
22.	Composite design of floral and geometric motifs, acanthus leaf and geometrical composition of floral pattern	Floral pattern of a half leaf of acanthus	Moulded band of lotus petals pointing inward. The top and base portion completely missing

2. *Arches having central medallions* (Pls. LI, LII, LIII, LIV, LVA).

H. 1′-6″ to 1′-6½″ B. 2′-6″.

This type is of almost same form as the arches with undercut. But this type is slightly smaller in size and is more roundish. They are also on stepped backslabs.

But they differ from other arches in two respects: (a) Surmounting medallion-like decoration, (b) Central medallion. This arch can be divided into five main parts:

(A) The surmounting medallion-like decoration
(B) Pair of diverging volutes under this medallion
(C) Flanking volutes at the base
(D) Decorative band
(E) Central medallion

(A) The surmounting medallion like decoration (dia. 3¼″) is composed of floral motif. Near the base, it is flanked by two leaves sprouting out from the top of the volutes which in turn form the top of the arch.

(B) The pair of diverging volutes (dia. 2½″) is a typical feature of this arch. These volutes are formed by averting the outer edges of the circular arch top. They are devoid of any decoration.

(C) The heavy side volutes which flank the arch at its base are kept to give stability.

(D) The broad decorative band which runs all along the arch is composed of three bands. Two outer bands (2¼″) are composed of geometric and floral motifs such as chequer, acanthus, olive leaf etc. carved in relief in incision while the inner band is of either a rounded mould or a band of protruding lotus petals in ‘ *Ulto Relievo* ’.

(E) The central medallion is the chief attractive feature of this arch. These medallions are generally decorated with floral motifs (Only one arch with grotesque is found).

The central medallion and the decorative bands of the arch proper are separated by a prominent deep groove running all round the medallion.

The following table gives the details of these arches.

Arches with Medallions

Sr. No.	*Main band*	*Mould*	*Inner border band*	*Medallion*
1.	Composite pattern double olive leaves and tips of lotus leaves	Dentils	Floral motif of leaves in geometric composition	Missing.
2.	Double olive leaves	Ribbed line, zigzag line and dotted line	Lozenges	Geometric composition of eight floral petals

Sr. No.	*Main band*	*Mould*	*Inner border band*	*Medallion*
				within a circle marked by a band of lozenges within ribbed lines.
3.	Composite decoration of single olive leaf and bead and reel motif	Dentils	Tiny circles within squares	Floral motif of leaves in twists.
4.	Composite decoration of single half-leaf and tips of lotus petals	Dentils	Deformed lotus petals marked by a pair of vertical incised lines	Missing.
5.	Deformed lotus petals	A band of olive leaves at the top and bands of ribbed dotted and zigzag lines	Worn out	Floral composition of a corolla having eight main petals and tips of other sub-petals sprouting behind them, thus producing a convex top to produce a three dimensional effect.
6.	Deformed lotus petals having triangular tips pointing inward	Lotus petals	Not depicted	Geometric composition of eight floral petals.
7.	Composite band of deformed lotus petals and lozenges	Deformed olive leaves	Lozenges	Floral pattern of grape-leaf (?)
8.	Chequer pattern of diagonally half carved squares	Ribbed lines dotted lines and zigzag lines	Not decorated	Floral composition of a corolla having eight main petals and tips of other petals sprouting out from under the main petals. The centre of the corolla is decorated with a prominent circle marked by dotted ribbed line and a central motif.
9.	Composite band of geometric motif of diagonally half carved squares	Dentils	Only one incised line	Geometric composition of four deformed acanthus leaves. Their

Sr. No.	*Main band*	*Mould*	*Inner border band*	*Medallion*
	and tips of lotus petals			tips meet in the centre of the medallion.
10.	Thin band of bead and reel motif	Dotted and ribbed lines	Geometric composition of floral leaves	Two circular bands of lotus petals in prominent relief. The central corolla overlying the super circle.
11.	Composite band. An acanthus leaf at the top centre, band of alternate carved squares upto side volute top and double olive leaf pattern at the base	Dentils	Single olive leaf	Floral motif of twisting leaves within a circle marked by zig-zag ribbed line with a pair of ribbed lines.
12.	—	—	—	Floral motif of grape-leaf (?)
13.	—	Ribbed line of embossed squares	Embossed squares	Floral motif of grape-leaf (?)
14.	—	—	—	Floral motif of twists of leaves.
15.	—	—	—	Grotesque human face.

Capitals of Pilasters

The capitals of pilasters formed the top member of the pilaster, which had plain moulded base and rectangular shaft.

The capitals are of three types. But most probably originally there might have been some more variants, because whatever is discovered from the excavations is merely a fractional representation of the original number and variety. It should be noted that the capitals on Platform No. 1, some of which (eight) were found *in situ* represented only about 18% of the original number (44). From the group of other capitals which originally must have been comprised of more than seventy (36 of Platform No. II and many more on the drum). Fragments of only four to five capitals and one intact specimen have been collected. But however from whatever has been collected from the excavation it is not far fetched to state that it definitely represents the typical features of these pieces.

The basic decorative motif of these Indo-Corinthian capitals was the acanthus leaf which was represented in various sprouting forms on the squat capital. But inspite of same basic decoration there are some differences in size as well as decorative scheme. But primarily they can be divided according to size, according to which the decorative scheme also varies.

As such these capitals can be classified into three main types. Type 1—the smaller one—was employed on Platform I while the other two types were employed on Platform II and upper parts.

Type 1 (Pl. LV B)

H. 6″ B. 1′ - 1½″.

As usual this type is a rectangular slab. The decorations of this capital are confined on the front and parts of flanks. The remaining portion which was intended to be studded on the face of the stupa is kept plain. This capital can be divided into three components: (A) Lower, and (B) Upper bands and (C) Central rectangular decoration.

The lower band is composed of a horizontal rectangular decoration which is flanked by two obliquely sprouting small acanthus leaves. The upper band is also composed of decorations of acanthus leaves. It has a squat central leaf in a horizontal rectangular band which like lower band is flanked by obliquely sprouting acanthus leaves. The decoration of upper band is uniform in all the capitals but the decoration of central horizontal rectangle of lower band varies in every capital. The decorations on these rectangules are composed of geometric as well as floral motifs such as chequer patterns, acanthus leaf, bay or laurel leaf, and olive leaves. The base of the capital is composed of a rounded ledge.

Type 2 (Pl. LV C)

H. 7″ B. 1′ - 2½″.

In form and basic decorations of acanthus leaves this type does not differ from Type 1. But the difference is in the decorative scheme. In this type the acanthus leaves are depicted as if sprouting from under the capital. Thus all lines of relief decorations are either vertical or oblique only. They impart a more vigorous force of sprouting then Type 1. The decorations of this capital can be divided into two bands only, which are separated by a prominent ribbed line.

The upper band is composed of three parts—the central main leaf and the flanking tendrils. The lower band is composed of two acanthus leaves with an egg motif in the centre which is marked by tiny circles. The base of this capital is finished with a rounded ledge decorated with dotted incised oblique lines.

Type 3

H. 7″ B. 1′- 2½″.

This type is same as type 2, but instead of the central egg motif in the lower band it has a four petalled floral motif in a half circle.

Medallions

Only two medallions (Pls. LVI A & LV D) have been discovered. But it seems that originally there must have been many more. These medallions are carved on square slabs (1′ - 4″ × 1′ - 4″ square and 7½″ thick). The decorations of these medallions are confined within a circle marked by a prominent rib. This circle decoration in relief is projecting out from the square field very prominently (1¼″). Although only two specimens are found, their floral decoration differs very clearly.

Type 1 (Pl. LVI A) has a composite floral motif which is depicted in a bunch with twists and turns. Type 2 (Pl. LV D) has a convex bulging surface which depicts a bunch of lotus petals sprouting out and thus forming a bulge projecting six inches from the surface. These medallions were most probably arranged either under some cornice or other architectural feature on platform or drum.

Pilasters (Pl. LVI B)

This group is comprised of only small pilasters measuring H. 1′ -3″ B. 7½″. They are manufactured as single pieces. Actually these pilasters are replicas of the bigger pilasters which form the part of the architectural features. They are already treated in the chapter regarding architecture, hence, like the bigger pilasters; in components, shape and decorations they can be divided into three main parts: (1) Base (2) Shaft (3) Capital.

The base is plain and devoid of any decoration except its formative horizontal rounded mould near its base. The shaft having a rectangular section is marked by a prominent incised mark in its centre. In form and decoration its capital is the same as Type 1 capital (Pl. LVB). Its decorations can be divided into three main parts: Two bands—upper and lower—and the horizontal rectangular decoration. Both the decorative bands are decorated with stylized acanthus leaves in relief represented in horizontal bands. The central rectangle in the lower band is invariably hatched by incised criss-cross lines.

These pilasters formed the part of the niche in which images of Buddha in *Dhyanamudra* were seated. Actually they flanked the Buddha images and supported the surmounting chaitya arch. The side volutes of the surmounting arch rested on the capitals of these pilasters.

Bases of Pilasters

These bases formed the lowest member of the bigger pilasters in relief which separated the bays on the platforms and probably the drum also.

They are very simple and are devoid of decorations of any kind. The base can be divided into three parts (i) Plain fillet band at the base, (ii) central rounded mould, (iii) top ledge-like mould. The plain fillet band (2¾″ to 3″ broad) is devoid of any decorations. The central mould and the top band (2½″ broad) are undecorated. All these features are worked only on the front portion and parts of flanks. 6¾″ to 7″ of base which was to be set in the surface of the structure was kept plain, which, as it was to form a part of masonry work was kept rectangular in section.

Brackets or Dentils (Pl. LVII).

Brackets or Dentils are manufactured in two forms: (1) Bar-like long dentils in one piece and (2) groups of threes on the rectangular brick

Type 1 (Pl. LVII A) is a long bar-like piece rectangular in section. Only its 5¾″ of one end which was decorated was intended for protruding out of structure to represent a dentil or a bracket. Therefore only that much portion is decorated. The remaining 1′ -0″ is kept plain. The decorated end is hyperboloid in section and looks roughly like an hour-glass with constricted middle. This portion is decorated with plain or dotted incised lines.

Type 2 (Pl. LVII B) is represented in groups of threes. These dentils are depicted on the longer flank of the rectangular brick. In this case also only the dentils were to be kept out of the structure, hence, the remaining portion of the brick which was to be fixed into the masonry of the structure was kept plain. This type has two varieties which inspite of their similar basic inverted stepped form differ in decorations. One type has got only incised decorations of chevrons while the other has only simple compositions of incised lines either horizontal, vertical, or oblique.

Decorative Bricks

The term ' Decorative Bricks ' is used to convey the meaning of those bricks which have decorations carved on them and hence are used for decorative purpose. Therefore as such these bricks play a double role. They form some feature of the architecture and decorate the structure or part of it as well. Generally its flank along the thickness is decorated.

These decorations are either geometric or floral and sometimes even compositions of both. But the decorative facet of a brick is determined by its position in the structure and its function, hence, on basis of form, function and decorations, decorative bricks can be classified into two main groups:

(1) Rectangular bricks
(2) Square bricks.

Rectangular bricks (17″ to 16½″ × 11″ to 10½″ ×2¾″ -3″)

These bricks are of same size as the ordinary bricks used in construction. This is quite obvious because one of their function is to be the part of the structure, hence, their dimensions ought to tally with those of other bricks. Their decorations are confined along one of its flanks along its longer side. These decorations are of two types: (i) In form of ovolo moulding* (ii) Fillet bands.

Type i is utilized invariably to decorate cornices by producing horizontal string course ovolo moulds, running all along the structure. These decorations are floral only. Only two floral motifs are utilized for this purpose:

(a) Acanthus leaf,
(b) Laurel or bay leaf.

The acanthus leaf is depicted in three forms:

(i) In single leaf pattern
(ii) Composite leaf pattern with intervening egg motif
(iii) Composite leaf pattern with intervening floral motif

---

* In quarter-ellipse section receding downward

The single leaf pattern is a verysimple decoration (Fig. 47, 4 & 5 Pl. LVIIIA). On this brick three acanthus leaves are depicted in a horizontal row with the intervening egg motifs which is decorated with tiny circles on them. The leaves are depicted sprouting from the receding bottom and after following the ellipsed quarter circle mould reach upto the top line. Every leaf has three vertical central lobes according to serration of leaf. This group of three lobes is flanked by two spoon-shaped broad lobes and a pair of leaf tips flanking the base.

These bricks are utilized to produce the lower most ovolo moulding under the cornice of Platform No. I. (Pl. IX A.)

(ii) The composite leaf pattern with intervening double egg motif (Fig. 47, 6; Pl. LVIIIC) is an intricate pattern composed of stylized acanthus leaf. In this type the characteristics of serration, turn of sprouting and end tips of the acanthus leaf are emphasized to produce more vigour and force of an intricate play of lines in relief. For this purpose the spinal lines of the leaf are curved in semi-circles in such a way that two prominent spoon-shaped tips of adjoining leaves touch each other in the centre of the brick just above the double egg motif. The upper side-corners of the brick are decorated with suspended spoon-shapedl eaf-tips which point inward towards the centre of the brick. Thus every brick depicts two halves of acanthus leaf sprouting from centre and again meeting at the top centre of the brick after a curviliner sprout in opposite directions. Therefore when the string course horizontal mould is to be prepared these bricks were arranged in a string course, thus bringing together the two matching halves of acanthus leaves of adjoining bricks together to produce a stylized row of vigorously sprouting acanthus leaves intervening by double-egg motif.

(iii) The composite leaf pattern with intervening floral motif (Fig. 47, 7; Pl. LVIII B) is also an intricate design of stylized acanthus leaves. It represents a half acanthus leaf with six lobes pointing inward. To the left of this is the floral motif of three petals. To its left is represented another intricate representation of acanthus leaves. The form of the leaf is not cared for at all. But its serrated and ribbed lobes are emphasized. The latter are represented turning inward superimposed by a curved tip having three lobes. Another leaf emerging from base of the brick is depicted obliquely. This leaf ends near the top corner of the brick.

This type too, like Type ii produces an ovolo mould of acanthus leaves in a row. No specimen of this type was found *in situ* but it seems that the mould of these bricks was also employed under some cornice or rounded mould on platform, or the drum.

B. *Bricks having laurel or bay leaf decorations* (Fig. 48, 3; Pl. LVIII D)

These bricks are fretted with stylized laurel or bay leaves in relief. The form of the leaf is almost completely changed and it looks like a spear-head. On each brick these leaves are represented in groups of horizontal rows of threes arranged on a horizontal mould. Their pointed tips are pointing towards their right. Every leaf is in a pointed spear-shaped form having an incised line along its spinal line joining its base and tip. The rounded base is flanked by two tiny volutes turning inward. The horizontal string course ovolo mould produced by these bricks was most probably employed under some cornice or rounded mould.

C. *Bricks having rounded tipped leaves* (Fig. 48, 4; Pl. LIX A)

This group includes decorations of oblong shaped leaves created by prominent ribbed outlines and a groove-like depression along its length. On each brick groups of hortzontal rows of four leaves are arranged in horizontal mould. Thus a string line course of these bricks would produce a continuous pattern of leaves arranged in a string course on an ovolo mould.

D. *Bricks having chequer pattern of floral motif* (Pl. LIX B)

This type has a chequer pattern having four rows of squares. Each square is obliquely half carved on which three tipped floral motif is represented.

Rectangular bricks having decorations of fillet bands:

This group includes bricks having geometric designs only. According to designs these bricks can be classified into two types:

(1) Having chequer pattern.
(2) Having hook pattern.

(1) The chequer pattern (Fig. 48, 21; Pl. LIX C) is composed of a simple but intelligent composition of alternate arrangement of carved out square and plain square. The plain squares are marked with incised oblique crosses produced by bisecting diagonals. In all four horizontal rows of such squares are depicted.

The chequer-patterned bricks were utilized to produce a fillet band at the base of the cornice surmounting the capitals of pilasters. They were used thus at least on Platform I where they are found *in situ*. But it seems that they were used on the cornices of upper platforms and even the drum. (One specimen having circular side is found)

Square Bricks (4″ to 4½″ square)

These bricks are quite different from the rectangular bricks. They differ not only in size or shape but in their decorative scheme as well as their function in the structure. Like rectangular bricks they are not chamfered for producing moulds but are simply meant for decoration of surface of the structure, hence, it can be stated that their function was only decorative and not decorative as well as architectural. As such one of their types—having figure of Buddha and those having human or animal figures—can be classified even as individual sculpture. All these decorations or designs are enclosed within a square produced by keeping a plain border of about ½″ to ¾″ along the edge of bricks.

According to subject of decorations these bricks can be divided into five main groups having :

(1) Buddha Figures
(2) Grotesque faces
(3) Animal faces
(4) Floral compositions
(5) Geometric designs
(6) Conch composition

(1) *Buddha figures* (Pl. LX A, B)

This type includes only two bricks which were found from the core of the stupa. Actually these bricks were found along with six Buddha images which were dumped in the core of Platform I. The seated Buddha is depicted in *Dhyana-mudra*. As the figure is very small no details are rendered but only the posture. The form and features of face are executed very roughly, as a result, they look like unfinished pieces. The limbs are also stiff and deformed.

(2) *Grotesque human faces* (Pl. LXI A, B, C)

This type depicts faces of human figures in ugly destorted forms to produce grotesque effects. All these faces are depicted in front pose. To produce grotesque effect the eyes are kept wide open and bulging out, lips of wide open mouth are drawn up and exagerrated snorting nostrils are represented wide open. The ears are placeed on top corners of the bricks. The hair are sometimes combed forward (Pl. LXI C). Teeth of some faces are kept bare in open mouth but in some instances only canine teeth are protruding out of the mouth (Pl. LXI A). Figures having composite features of human and animal figures are also common (Pl. LXI C).

(3) *Animal faces* (Pl. LXI D, E, F).

This group has heads of animal figures. Heads of lion and tiger are common. Like the human faces these faces are also depicted in grotesque looking distorted features of bulging wide open eyes, snorting nostrils, wide open mouth and bare teeth. The ears of these faces are placed on top side corners of the brick.

(5) *Floral motifs* (Pl. LXII, LXIII, LXIV).

This group represents leaves and flowers. Various forms of acanthus and laurel leaves and petals of lotus are common. Geometric designs and compositions of floral motifs are used.

Acanthus leaves are depicted in two ways:

(a) Vertical sprouts (Pl. LXII A).

(b) Oblique sprouts (Pl. LXII B, C).

Type (a) having vertical sprouts is having single leaf motif. It has double-tipped central lobe flanked by four sub-lobes. On the whole this design looks like a rectangular design.

Type (b) which has oblique sprouts has a prominent central spoon-shaped tip flanked by one, two, three or four tips, on either sides. The corner from which this leaf sprouts is marked either by prominent depression or a segment of a quarter circle in ribbed line (Pl. LXII B, C).

The laurel leaves (?)are represented in a much rounded form (Pl. LXII D E, F.). to suit the square field in which it was to be depicted. These decorations can be divided into two types. One type has four leaves (Pl. LXII, D, E) tips of two leaves in diagonal lines are meeting each other at the centre of the brick, while the other two leaves in diagonal line are having their bases meeting under the tips of the other diagonal pair. Their tips are pointed to opposite corners.

In second type instead of diagonal alignment the leaves are arranged in rows (Pl. LXII F). Each leaf is carved out in a square. Thus in all there are nine leaves. The arrangements of tips and bases is same as type 1 *i.e.* tips and bases of leaves in cross-diagonal lines meeting at central point. Thus, they are forming a design of alternate leaves which are pointing inward and outward.

The type having lotus petals can also be classified into two main groups.

(A) Four petalled decoration.

(B) Corolla decorations.

The four petalled decorations (Pl. LXIV B, C) are composed in two designs. In one type the four petals are depicted sprouting from four corners of a square, with their pointed tips meeting at the centre of the square. In the second type the two tips and two bases of the petals meet at the centre.

The corolla type decoration is typical (Pl. LXIV D, E). It represents the sprouting round corolla of lotus petals in a bulging convex relief rising about the square field of the brick. Three circular rows of petals are depicted overlapping each other and pointing towards the centre.

One type having composite floral pattern is also there (Pl. LXIV, F). It represents a composition of lotus petals and acanthus leaf. It has four lotus petals with their tips meeting at the centre of the brick. This is bordered by four halves of acanthus leaves attached to four sides of the square.

(5) *Geometric Designs*

Purely geometric designs are chequer designs. They are of two types. Type 1 is composed of alternate carved out and plain squares with plain squares further decorated with incised oblique crosses. The other type (Type 2) is also a chequer pattern (Pl. LXIII, F), but in this type the squares are divided diagonally into halves out of which one of the halves is carved out in a sloping depression. The other half is marked by a prominent incised line incised from corner to the centre of the square.

The geometric design to form floral motif is also common. This pattern is produced by common method of bisecting circles (Pl. LXIII, E).

The following table gives the details of the types:

Square Bricks

Sr. No.	*Basic Motif*	*Composition*
1.	Acanthus	In a vertical rectangular motif sprouting up two central lobes are flanked by four lobes on each side.
2.	Acanthus	Leaf form deformed, diagonal composition of three lobes prominently marked by spinal grooves.
3.	Acanthus	Deformed diagonal composition of seven lobes marked prominently by spinal groove.
4.	Acanthus	Variant of No. 3 with a segmental arch near the base of the leaf.
5.	Acanthus	Variant of No. 4 having nine lobes and the decoration of base segment is marked by an incised decoration.
6.	Deformed floral motif in geometric composition	Four deformed floral motifs in cross-diagonal alignment. Tips and bases of each pair meeting at the centre of the square. The leaves are deformed by their rounded form.
7.	Deformed floral motif in geometric composition	Variant of No. 6, having prominently grooved spinal line.
8.	Deformed floral motif in geometric composition	Geometric composition of nine leaves. Each leaf is depicted in a diagonally half carved square.
9.	Deformed floral motif in geometric composition	A composition of four leaves pointing outward. The spinal line of the leaves are marked by prominent grooves in wavy lines.
10.	Floral leaves in geomemetric composition	A geometric composition of four floral leaves composed by bisecting segments of circles. The edges of leaves are marked by ribbed lines and their spinal line is marked by a prominent incised line.
11.	Floral leaves in geometric composition	A variant of No. 10. This type is marked by a prominent uninterrupted diagonal groove unlike No. 10 without break in at the centre.
12.	Floral leaves in geometric composition	A variant of No. 10. It differs from No. 8 in only one respect. *i.e.* the decoration of the four sides of the square. These sides *i.e.* the space between the leaves is decorated with double ribbed lines in form of segments of circles.
13.	Floral leaves in geometric composition	Geometric composition of composite design formed by sixteen leaves. These leaves are produced by deformed circles of ribbed lines. Every leaf is marked by incised line along its spinal line.
14.	Floral decoration	Composition of two half corollas of lotus petals within half circles of ribbed line. Each half circle has two complete petals towards centre and two half petals near side edges. The two half petals near the side edges were kept like that because these bricks were utilized to produce a horizontal band in string course.

Sr. No.	*Basic Motif*	*Composition*
15.	Lotus petals	Composition of four lotus petals sprouting from the four corners of the square. Their pointed tips meet in the centre. The outlines and spinal lines of petals are marked by prominent incised lines.
16.	Lotus petals	Composition of four petals—two pointing towards corners and the other two towards centre. The two pointing towards corner are sprouting from depressed corner, and their tips meet at the centre. Their meeting point is above the other petals. The other two petals unlike the former pair sprout form a depressed centre and their tips end at plain opposite corners of the square. The space between the leaves is decorated with tips of petals sprouting out.
17.	Corolla of lotus	Composition of two rows of concentric circles. The outline of every petal is marked by ribbed line and its spinal line is marked by incised line. The sole design is executed on a convex surface; within a square.
18.	Corolla of lotus	A variant of No. 17 but this type has no prominent enclosing line of square.
19.	Composite decoration of acanthus leaves and lotus petals	A composite design formed by four half leaves of acanthus is arranged in half circles along sides of square in such a way that a rhombus like design is produced in the centre. Four lotus petals sprouting up are depicted in this enclosed centre.
20.	Conch motif	Composition of four conches arranged in diagonal lines, with their pointed ends in mouths are meeting at the centre and thus the circles on the mouths form concentric circles at the centre.

APPENDIX A

Identification of foot-prints of animals found on the bricks from Devnimori

Introduction

Interesting evidence was obtained of the animals moving around Devnimori, when the bricks were being manufactured for the use in the construction of the stupa and the vihara. Some of these animals had left their impressions on unburnt bricks, probably kept for drying before firing. These bricks were later on fired and utilised in the structures.

Identification

The following vertebrates are noted in this fashion

(1) Dog
(2) A Bovine
(3) Human being.

Dog (*Canis familiaris*) (Pl. LXV B)

The dog has left very interesting foot-prints on bricks. These foot-prints (3″ in length) seem to belong to a single animal. Almost the same size of the paws and the general nature of the situation does not seem to indicate the possibility of these impressions to belong to two animals.

One pair of the impressions is rather shallow and show two distinct marks of an animal possibly in standing position. The other pair with deeper and overlapping impression marks a rather different position. These impressions seem to mark a rather swift moving animal. The story from these impressions suggests that the animal moved towards some object and returned rather quickly. This retreat however was not a gallop in fear. Probably he was driven back by a brick-layer.

These impressions raise an interesting question about the breed of the animal. The comparatively large paw suggests that it was a full grown animal. The present measurement of paw of a *pariah dog* standing to a height of 22″ is 2-8″. This suggests that this dog was better bred and could be classed as a medium size dog approaching the standards of German Shepherd dog or similar other type. He might be a fairly strong dog.

Bovine (Pl. LXV C, D)

The Bovines are represented by more impressions, which are fairly clear. Two impressions are fairly deep while the third is rather faint and small.

These impressions are those of the young calves of either cows or buffaloes. They might have moved in this area, but their record is not so interesting as that of the dog.

Man (Pl. LXV E)

There is a deep impression of the heel and arch portion of a man. It seems to be the foot-impression of some worker who might have stamped his foot on fairly wet bricks.

Conclusions:—If careful observations of ordinary bricks are made, many interesting sidelights on the life conditions of men, who were responsible for this construction could be gathered. From this study one can imagine the brick layers work in open where their factory had free access to the dogs and other animals. This evidence suggests that the whole work might have been done in the open, and might not have been well protected as is the case even now of the brick layers workshops.

APPENDIX B

Treatment and Preservation of the Metal Relic Casket

The metal casket found inside the stone casket, alongwith various ritual offerings, was a tightly closed, bowl shaped copper box. It measured 4 cms. in height and 6 cms. in diameter at the base and 6.8 cms. at the top, and closed with a securely fitting slip-on-lid.

The casket was thickly incrusted all over its external surface with corrosion compounds of copper. The incrustation effectively sealed the lid with the body of the casket. Fortunately, the line of opening between the lid and the body was faintly discernible.

Opening of the casket

In view of the great importance of the material it contained, the casket was X'rayed from the top before any attempt was made for opening it. The radiograph (Pl. LXVI A)[1] indicated the presence of a globular vessel like object along with another small arrow shaped piece, lying by its side. Opening of the casket was a very delicate process. It was but natural to see that no damage was caused either to the casket or the revered relic it enshrined. The usual reduction methods for reducing such copper corrosion compounds were considered unsuitable in this context. Application of processes like the chemical dissolution of incrustation or the electrolytic reduction, it was feared, would lead to permeation of the chemicals so employed through microcracks or cavities in the body of the corroded metal. Naturally, that would result in contamination of the objects within the casket. It was, therefore, considered necessary to employ a restricted process of electrochemical reduction over the incrustation around the line of opening. The paste was covered with cotton wool which was kept moist with drops of dilute sulphuric acid. The process was allowed to continue for fifteen minutes (Pl. LXVI B). The paste was then cleared and the area mopped dry to note the effect. On repeating the process thrice, the lid was found to be loosely perching on the body of the casket. It was then possible to open the casket without even disturbing the positions of the materials within it.

The casket contained a beautiful globular gold vessel with its lid broken. The lid lay by the side of the vessel, as was indicated in the radiograph. Along with the golden vessel were also found five tiny bundles of cloth (Pl. XXXI D). Folded in these bundles were various ritual offerings. The casket within was not heavily corroded. However, the few lumps of corrosion compounds of copper, found within the casket, did help the textile bags to remain intact, the corrosion compounds having acted as sterilizing agents. The gold vessel contained the sacred ash, relic of Lord Buddha, though its lid was broken.

---

[1] Grateful thanks are due to Dr. N. A. Dave, for the radiograph.

Treatment and Preservation of the Caskets

Though the incrustation on the outward surface of the casket was thick, it was neither continuous nor coherent. A careful observation of the casket revealed that there was no inscription underneath the incrustation layer. Analytical and microscopic study of the corrosion compounds indicated the presence of the following minerals of copper: (1) Green basic carbonate of copper (malachite), (2) Pink cuprous oxide (Cuprite) and bright green basic chloride (atacamite), cuprous chloride was not discernible. Among the three minerals, atacamite was predominant. This can be easily explained. The metal was perennially in contact with the ritual offerings—a mixture of dark ashy and earthy substances which incorporated, *interalia*, small pieces of wood, beads and small thin strips of gold and silver metals. The mixture on analysis is found to be rich in humus and chloride. When fresh, it might have been damp. The contact of the metal with the chlorine bearing ritual-offering, led to the primary ' bronze-disease ' reaction, the formation of cuprous chloride. This on its turn got converted into basic cupric chloride—alacamite. As the casket was sealed within the stone casket, inside the stupa, it was free from further atmospheric reaction, hence, the corrosion process was restricted to the formation of a heavier incrustation of alacamite and smaller quantities of cuprite and malachite. On one spot in the base of the casket, an area of over one sq. cm. consisted of nothing but bright green basic chloride of copper.

It was considered desirable to retain the casket in the form in which it was found in the excavation. The object was, therefore, treated in changes of 5% aqueous solution of sodium sesqui carbonate so as to convert the malignant chloride incrustation into non-malignant cuprite. It was then flushed in hot and cold distilled water to free the micro-cracks and cavities in the body of the casket, as well as, the non-malignant incrustation layers, from chloride. When free from chloride, it was dried in desiccator over silicagel and preserved with a coat of 2% solution of poly-vinylacetate.

CHAPTER VII

CONCLUSIONS

Introduction

The excavations and explorations at Devnimori had shown that this valley was occupied from the Prehistoric Period and the occupation continued with occasional breaks upto the present.

The Buddhist Settlement

The Buddhists usually preferred to stay near a town or a village but not in it. They liked the groves or gardens or other natural settings for their viharas.[1] Following this method the first Buddhists seem to have settled near the ancient town, buried under the present Shamalaji and they chose to stay on the bank of the river and built the vihara. This is natural, as the first necessity of any settlement is the residential quarters.

Type of Viharas

The first Vihara that was built was a *Chatushala* type, with an open courtyard around which the rooms were built. Outside the rooms, at least towards the main entrance some type of verandah was built. The room on the south-east however indicates that this plan though following the *Chatushala* pattern had some difference at a later date. This settlement of early fourth century A.D. heralded the activity of the Buddhist monks in this area. The second vihara was also of this type.

Name of the Vihara I

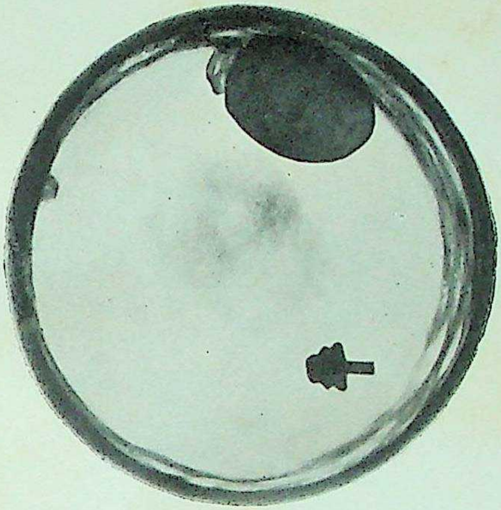
The first vihara was known as *Mahavihara.* This fact indicates that here, there was only this vihara and it had no other specific name. The term was full of meaning to the local inhabitants and hence, no other appendage to this term was deemed necessary.

The term Mahavihara is well known as this name is found at Shalihundam, and other sites. It, at the most, indicates that this vihara was of some importance due to its size or activity or both.

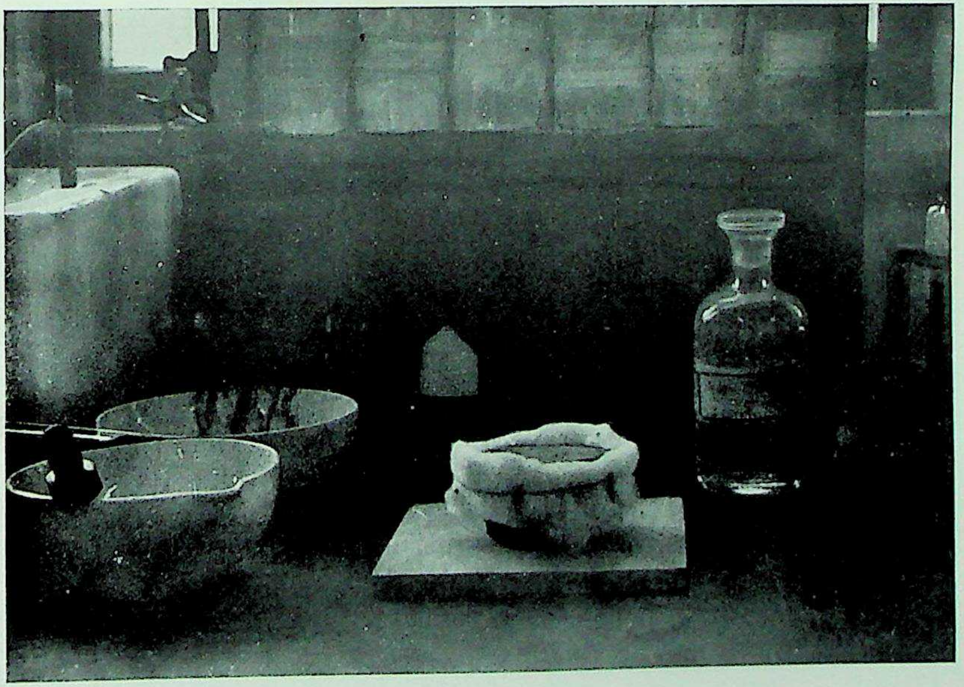
---

[1] This fact could be very well seen on many Buddhist sites. Most of the places that Buddha visited, and where he stayed suggest this method of settlements. Privacy and vicinity of the lay disciples who would give alms were further considerations.

PLATE LXVI

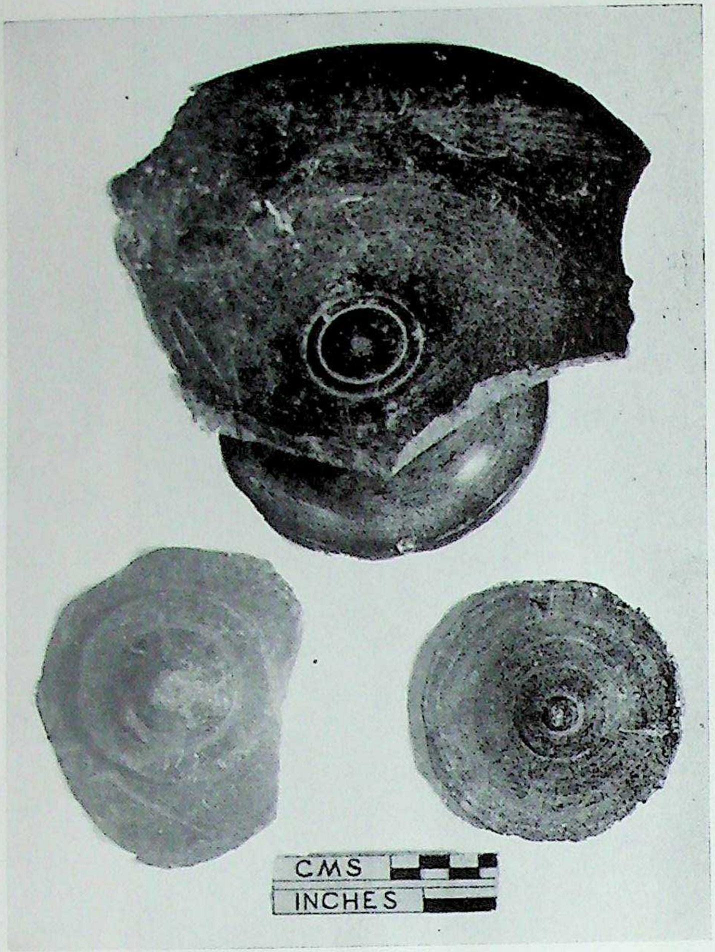


A. Radiograph of copper box
(*Courtesy* **Dr. N. A. Dave**)

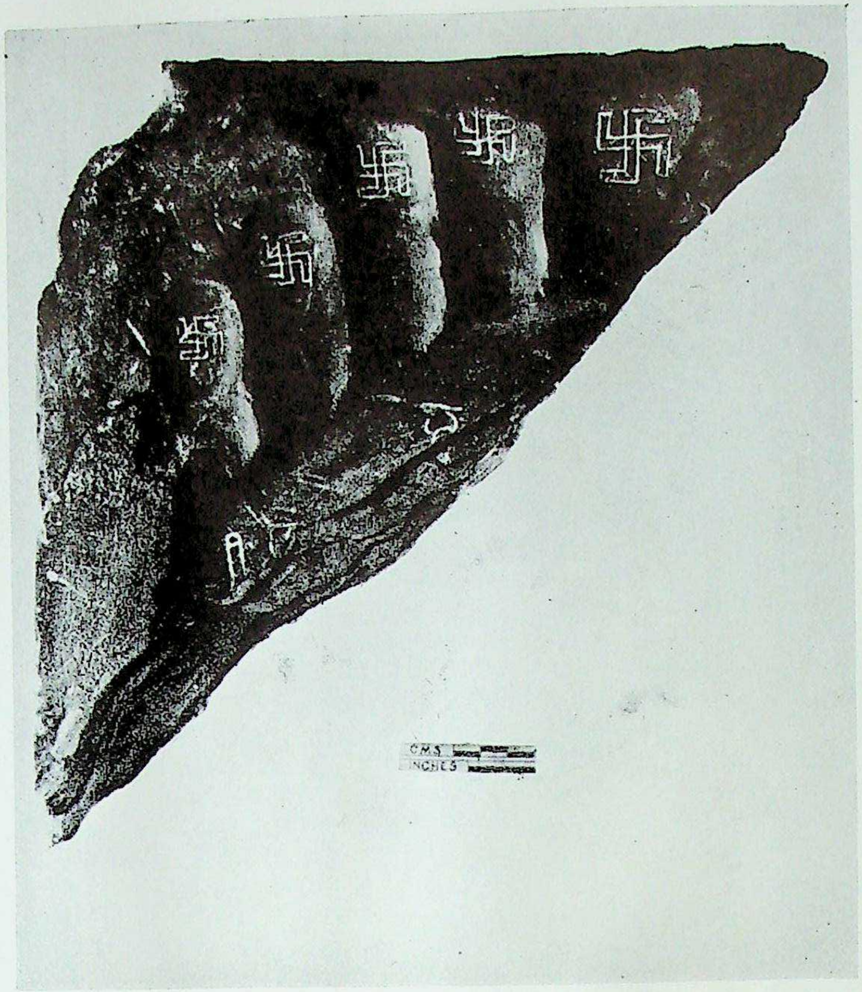


B. Process for opening the copper box

PLATE LXVII

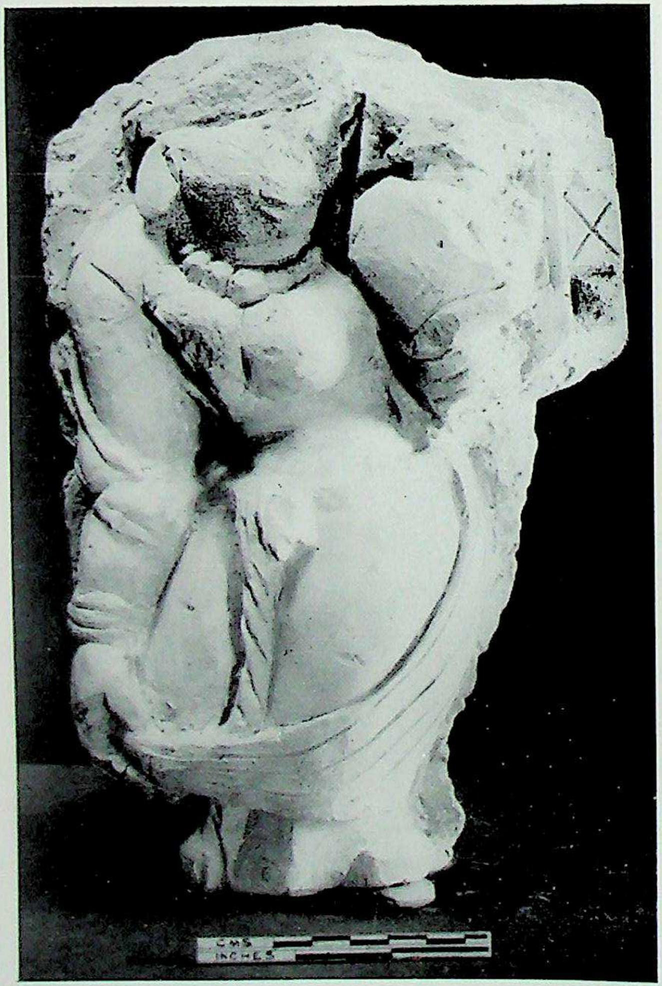


A. Schist objects (P. 89-90)

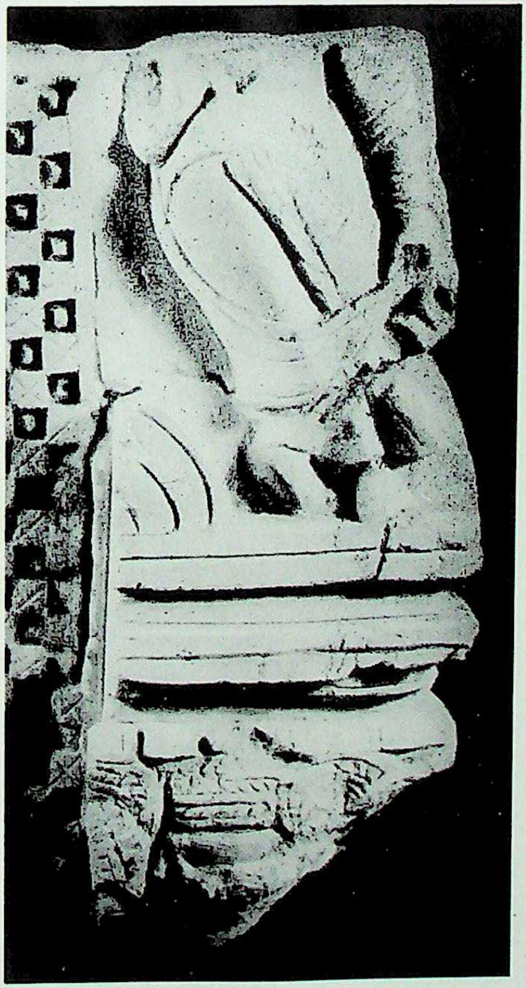


B. Foot-Print of Buddha (?) (No. 5 on P. 89)

PLATE LXVIII



A. Figurine on a Jamb. (Inside of Mahastupa, course No. 6) (P. 130)



B. Figurine on a Jamb (Inside of Mahastupa, course No. 6) (P. 130)

Worship of Buddha's Image in Mahavihara

This was a fairly large vihara with the arrangement of the temple of Buddha's image. This was a spacious room with flooring of schist slabs (Room No. 16.) This indicates that the monks living here were worshipping the image of Buddha. The absence of the other figures of Buddhist gods and goddesses and Bodhisattvas suggest that these monks had not accepted the advanced iconographic worship of many Buddhist gods and thereby indicate that they might be the early Buddhists who took to the image worship. The absence of many gods and goddesses of the Mahayanists at this place raises the problem of the identification of the school to which the Buddhists at this place might have belonged.

The School

From the art and other features it seems that their inspiration is to be found in Western India. From the study of the Buddhist schools existing in Lata and Malva as recorded by the Chinese pilgrims we find that the Arya Sammitiya Nikaya with its four subdivisions was most flourishing in Lata and Sindhu,[1] according to I-tsing.[2] Hieun Tsang also notes that in Anandapura the Sammitiyas were existing.[3] Anandapura was subject to Malava and in this country according to Hieun Tsang Buddhists were living in about 100 Samgharamas. They studied the Little Vehicle and belong to the Sammatiya School.[4] These regions of Anandapura and Malava were near each other as the latter was near Broach and the former was under the jurisdiction of Malava, and hence the present districts of Mehsana, Kaira, Sabarkantha and Dungarpur region of to-day are suggested to include parts of ancient Anandapura and Malva. This inference then would indicate that the Buddhists who stayed at Devnimori might belong to the Sammitiya School, at least in 7th century A.D. and it is highly probable that they existed here before this time also.

This brings us to an interesting question. Did the followers of Sammitiya Nikaya worship the images? I-tsing gives an interesting insight into the problem by noting that " Both (*Hinayana and Mahayana*)[5] adopt one and the same discipline (Vinaya), and they have in common the prohibitions of the five Skandhas

---

[1] S. BEAL, *Buddhist Records of the Western Word,* LXXVI.

[2] J. TAKAKUSU, *A Record of the Buddhist Religion* by I-tsing p. XXVI, p. 9.

[3] S. BEAL, *op. cit.* p. 258.

[4] *Ibid.* p. 261.

[5] Italics ours.

(group of offences), and also the practice of the **Four Noble Truths.** Those who worship the Bodhisattva and read the Mahayana sutras are called the Mahayanists (the great), while those who do not perform these are called the Hinayanists (the small)[1]. The *Yanas* were followed by the Buddhists of different Nikayas[2].

Looking to this definition it is probable that the Hinayanists did not worship Bodhisattvas. The absence of Bodhisattva figures at Devnimori suggests that the Saugharama and also the stupa belonged to the Sammitiya School of the Hinayanists. Sammitiya Nikaya is an older Nikaya and hence, it is tempting to associate the early settlement with this school.

Once these monks of the Sammitiya School establish themselves at Devnimori in the Mahavihara, their activity began gathering strength.

Changes of Viharas

They did not much alter the vihara which had been built, but they enlarged the outer verandah at least twice in some places, and at other places it was extended two or three times. The last extension on the north shows very poor workmanship. Inside the vihara also they raised the level of the courtyard, and built a seat for the monks to sit during the ceremonial meetings. After this, minor repairs might have been carried out. The viharas had only one storey having a roof with flat rectangular tiles for general coverage and triangular tiles for the corners. The Vihara II followed the same plan and showed signs of repairs.

At this site other viharas were built. Brick constructions as seen on the surface suggest that more than two viharas existed in this area.

Building of the Stupa

Once the Buddhists entrenched themselves at Devnimori, they might have planned to build the stupa. According to the custom as noted by I-tsing[3]. " The priests and lay men in India make chaityas[4] or images with earth or impress the Buddha's image on silk or paper and worship it with offering wherever they go. Sometimes they build Stupas of Buddha by making a pile and surrounding it with bricks. They put in the images or chaityas two kinds of *Shariras.* (1) The relics of the

---

[1] J. Takakusu, *Op. cit.*, p. 14-15.

[2] *Ibid.*, XXII.

[3] Takakusu, *Ibid.* p. 150-152.

[4] Chaitya and Stupa according to I-tsing are synonyms, *Ibid.* p. 121.

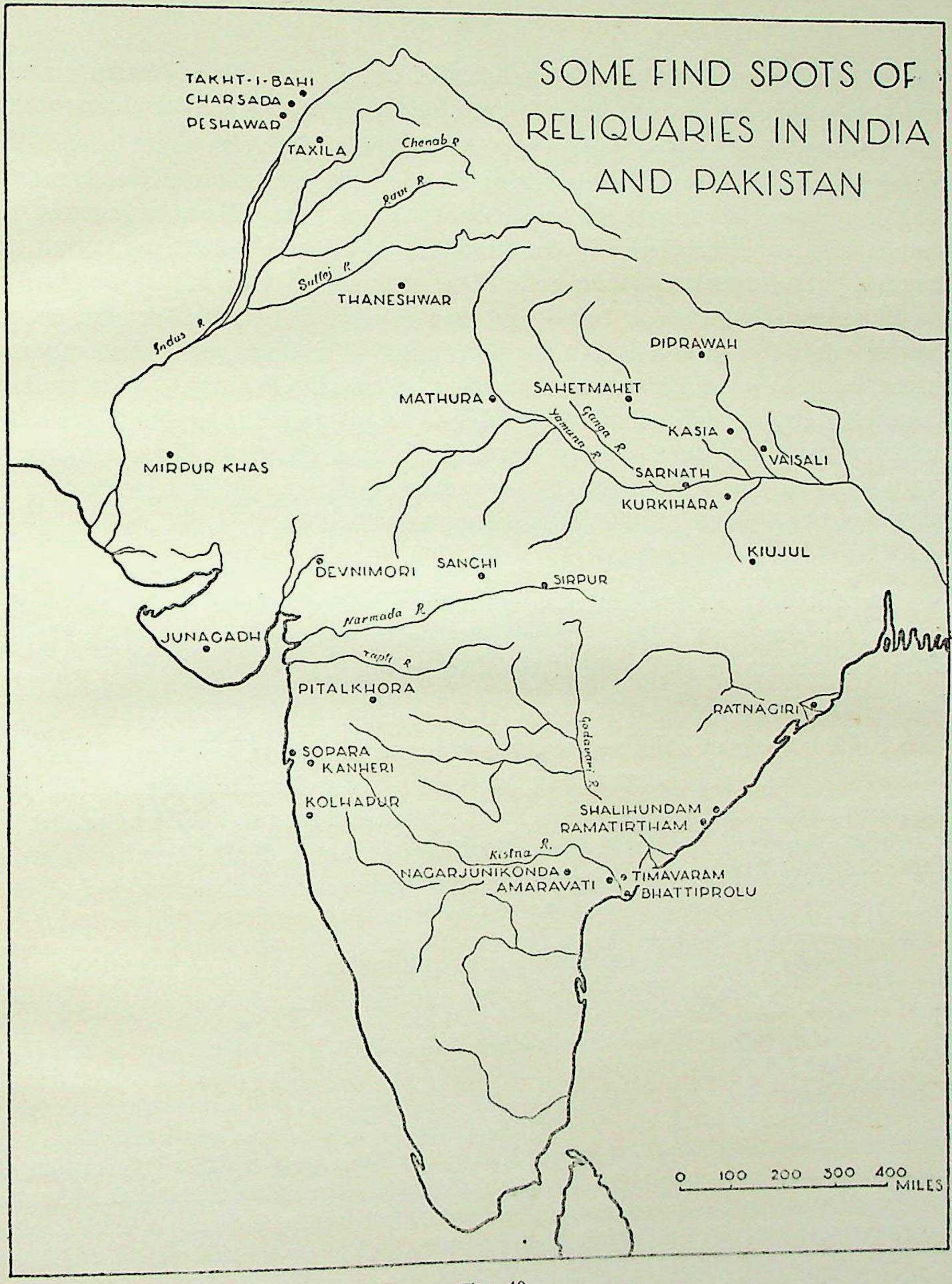

SOME FIND SPOTS OF RELIQUARIES IN INDIA AND PAKISTAN
TAKHT-I-BAHI
CHARSADA
PESHAWAR
TAXILA
Chenab R.
Ravi R.
Sutlej R.
Indus R.
THANESHWAR
PIPRAWAH
MATHURA
SAHETMAHET
Ganga R.
Yamuna R.
KASIA
VAISALI
SARNATH
KURKIHARA
MIRPUR KHAS
KIUJUL
DEVNIMORI
SANCHI
SIRPUR
Narmada R.
JUNAGADH
Tapti R.
PITALKHORA
RATNAGIRI
Godavari R.
SOPARA
KANHERI
KOLHAPUR
SHALIHUNDAM
RAMATIRTHAM
Kistna R.
NAGARJUNIKONDA
AMARAVATI
TIMAVARAM
BHATTIPROLU
0 100 200 300 400 MILES

Fig. 49

Great Teacher. (2) The Gatha of the chain of causation." The Devnimori stupa with these two relics indicate that this tradition was known in the 4th century A.D.

Two Buddhist monks, Agnivarma and Sudarshana took an active part in this construction. They seem to have procured the relics of *Dashabala* from some source[1] for this purpose and planned the construction of the stupa. The calculation of the amount of material required suggests that this project might not have taken more than five years for its completion.

The stupa was built of bricks and mud mortar. As it was left open to the sky the rain might have damaged the outer part. This damage required repeated repairs which were carried out with varying degree of efficiency. At later stage the repairs were done in a haphazard fashion. Apparently the repairs of the stupa continued for a long time. Along with the building of the stupa, they seem to have very well considered the phenomenon of recurring floods and took steps to safeguard the stupa by building platforms and a protective wall.

Chaitya

In this area an apsidal chaitya, a large brick platform, a hall and votive stupas were also built. The problem of their time could not be solved. Some of the votive stupas might be the *Kulas* of I-tsing[2].

Form of the Stupa

Stylistic study of building the stupa presents interesting problems. The form of this stupa followed the pattern that was known at the sites like Mathura, Nandangarh, Ghantasila. Its form is not highly elongated and seems to differ considerably from those known from the Punjab, Gandhara and even Sind. Further work in this direction is necessary to search for similar examples from these regions.

Decorative motifs

Its decorative motifs, the acanthus, the laurel and the olive could be traced to the Gandhara school. The stilted arches and the broad arches are highly characteristic forms that are seen in the Gandhara region. Beside these, the medallions and even the grotesque faces have western influence. The latter seems to be the Indianised version of the head of Medusa, which was so well known in the western sculpture.

---

[1] The inscription mentions that the relics are of Dashabala. Whether they the are actual relics of Dasabala or not cannot be ascertained. But the monks who raised the stupa believed that the relics were of Dasabala. Such belief in relics, wood of the original cross etc. are known in different religions.

[2] TAKAKUSU, *Op. cit.*, p. 82. I-tsing mentions that "They sometimes built a thing like a stupa for the dead to contain his relics. It is called a Kula which is like a small stupa, but without the Cupola on it". The four votive stupas had no drum, but had well-rounded mouldings. If the old construction ended at this point they may be considered to be a Kula. But no relics were found from them. Does it indicate then that they were the memorials of some well-known monks, who did not die at this place?

The shape and Method of inscribing the Casket II

The shape of this casket is similar to that from Gaz Dheri[1] site. The method of inscription also follows the style of the Shinkot Steatite casket inscription of the time of Menander (c, 115-09 B.C.). This evidence of the shape, as well as the style of inscribing it, indicates that the methods adopted at Devnimcri were better known in Gandhara region, and that the close similarity of these features is an indication of the continuity of this tradition in Western India.

Method of laying the caskets

The method of laying the caskets also has its parallel with that found from Gaz Dheri in Gandhara[1]. The form of the second casket and the method of laying it are almost the same. Unfortunately the date of the Gaz Dheri is not known, so the chronological position of those caskets cannot be ascertained. For want of such a data one could conclude that this style of laying the casket was known in Western India at least by the 4th century A.D. Such a method is not traced from other stupas. If such a method be traced to an earlier date in the Gandhara region, the influence of Gandhara in this sphere also could be established.

Figures of Buddha

Figures of Buddha also present an interesting problem. Two heads clearly show the hair style with a strong affinity with the Gandhara style, but there the comparison seems to end. The method of the muscular deleneation is rather different. The muscles are well-rounded but do not look like those of an athlete. In this respect these images are much closer to the figures of the Kushana age from Mathura. The curly hair of the other figures are seen not only at Mathura but they are found from the Gandharan area. As such, these figures show the commingling of traits both of the Kushana style of Mathura and the Gandhara style.

Mixed style

Such an admixture of various artistic elements was a well-known phenomena in the Indo-Afghan school as well as at Mathura. It suggests, therefore, that during the Pre-Gupta period in Western India a flourishing art-school with mixed style existed.

---

[1] *A. R., A.S.I., 1902-03*, p. 175.

Western Indian Art

The remains at Devnimori, then, point out that its sources of inspiration were those of Western Indian art of the Pre-Gupta period. The motifs similar to those that were seen at Devnimori were utilized by the artists at Sarnath, Ajanta and other places in the 5th and the following centuries. The study of these evolved motifs certainly indicate that the artists at Sarnath and in the Gupta empire did accept many features of the Pre-Gupta currents that were existing in the Indian traditions.

Art Kshatrapa and not Gupta

This flourishing Western Indian school was also influenced by the Guptas in the 5th and the following centuries, but not in the period when their political power or influence were non-existent or negligible in these parts. The powerful empire builder, Samudragupta did not go to the West to conquer the Sakas. The story of Ramagupta is too well known to require any comment to suggest that the power of the Sakas was not diminished even after the death of Samudragupta. It was after a period of turmoil and struggle that Chandragupta II could succeed in crushing the Saka power of Western India possibly by the beginning of the 5th century A.D.[1] The political conditions, therefore, clearly indicate that the Gupta influence need not be considered seriously so far as Western India is concerned for political power, or artistic achievements, when the Devnimori stupa was erected. The artistic tendencies that are revealed at Devnimori belong to the late Kshatrapa period of this region, and might be a collateral development in Western India where elements of Gandhara as well as Mathura art of the Kushanas were well-known and from these traditions this Kshatrapa art was created.

From this discussion it is evident that the style that was used at Devnimori is the Western Indian one. Its affinities with designs from Bikaner region, in the Uparkot caves at Junagarh, and with that from Mirpurkhas in Sind are striking.

Plan of the Stupa

The plan of the stupa consists of a series of squares enclosing a volute in the centre of which stands the casket or the main object of worship. This plan has not been found so far from other stupas of the early period. It is interesting to know that such a plan of an *Yantra* is given by Bhikshu Anagarika Govinda in his article on Symbolism of Stupa.[1]

---

[1] The latest date of Kshatrapa coins 319 which is equivalent to 397 A.D., and hence, Chandragupta's conquest would be dated after this period. See *Classical Age*, p. 19 ff.

The plan of Devnimori is indicative of the beginning of probably the tantric influences. The Buddhist belief that Asanga brought tantras from heaven in 4th century indicates that in this century this influence might have been felt and probably these ideas were given a monumental form. The stepped structure and the pot below it suggest that some religious ceremony was performed at this point.

Casket

The tradition of placing the relics in the stupa is as old as its acceptance in the Buddhist religion and several relics have so far been found (Fig. 49). However, I-tsing refers to a tradition of placing two kinds of *Shariras* in the Stupa. 1. The relics of the Great Teacher. 2. The Gatha or the chain of causation[2]. From the context here, it appears that probably both these things were placed in the Stupa. The one at Kasia contained both a pot and the Nidana Sutra[3]. The Devnimori stupa seems to take this tradition to an earlier period as is clear from the inscriptions of the Casket II.

These features of the plan and art styles are indicative of the artistic heritage and religious belief of the Buddhist, but the construction of the buildings would require materials, both local and brought from some distance. Here a study of the sources of the building materials is attempted.

Building Materials

The materials that were required for the construction of the buildings were, the bricks, mud, stone, wood and iron nails.

Bricks

The bricks were locally made from the clay of the Meshvo. This could be inferred from the fact that a number of brickbats revealed quartzite pebbles in their cores. These pebbles are widely strewn in the river bed and the outcrop of quartzites occur in this area.

---

[1] ANAGARIKA B. GOVIND, *Some aspects of Stupa Symbolism*, Journal of the Indian Society of Oriental Arts, Vol. IV, No. 1, p. 41, June 1936.

[2] TAKAKUSU, *Op. cit.*, 150.

[3] *Archaeological Survey of India, Annual Report*, 1910-11, p. 64.

The bricks as well as the terracotta objects that were used in the construction were all local products. The calculations of the bricks at least of the stupa suggest that the clay, necessary water, fire-wood and timber existed in this area. The artist might have come from the nearest settlement that lies buried under present Shamalaji.

Local manufacture of bricks and terracotta figures

The artistic brick-work and terracotta objects were also made at this site. This could be proved by the wastage of the manufacture. Overburnt images of Buddha, arches, of different varieties etc. were obtained from the core of the stupa. These objects indicate that the manufacturers had made them and they were spoilt while firing, so they became useless for decorating the stupa. They were made with religious purpose, hence, throwing them away would be an act of sacrilege, so they were dumped in the stupa for which they were intended. Incidentally, they provided good evidence for their local manufacture.

Workshop conditions

Another interesting feature of the manufacture of this material is indicated by the study of the foot-marks of the dogs, bovine and man. The brick with the mark of human foot is the result of hurry or carelessness. But the foot-prints of the animals suggest that the work was carried out in open fields where these animals roamed free. Occasionally they were probably driven away by the workers. This evidence suggests that the working conditions were similar to those that are found in the country side till this day.

Import from Shamalaji

This settlement of Shamalaji also supplied the necessary metal objects. Excavations at Shamalaji revealed that iron smelting was undertaken at this site in the early centuries of the Christian Era. This industry seems to have supplied the nails, chains and other iron objects that were used in the construction of the settlement.

Besides these items, stone of two varieties was used in the construction. One of them is the quartzite and the other is schist. Quartzite blocks seem to have been taken from the local outcrop. The schist blocks are also found locally, and were used by the builders. Thus it appears that almost all items necessary for building these structures were locally available as raw materials or were manufactured in the nearby town.

Material used by the Monks

The settlement was constructed of the local material, but some of the objects used by the residents show imports.

Sources of Stones

The stone objects that were used here are made of schist, sand-stone, carnelian, microcline and jasper.

Schist

Out of these stones, schist occurs locally, but the mines of Bhandaria, Deval, Sarken, Mathugam and Lemdi in the Dungarpur area are worked for the talc chlorite schist, from which sculptures and other stone objects are manufactured. Specially the mine of Bhanderia is used upto this day. The stone from this mine takes good polish.

These mines are within a radius of about 40 miles from Shamalaji. If these mines were worked in the past, it is probable that the stone used for the caskets might have been procured from one of them.

Sandstone

Sandstone however is available from the mines of Himatnagar. It is known as Ahmednagar sandstone because Himatnagar is a comparatively new name of the old town, Ahmednagar. It supplied the mullers, querns and similar objects. It was used for building the temple of Shamalaji and is used for repairs. Small images were made of this stone.

Carnelian, Jasper, Microcline

Carnelian and Jasper are both found in the Sabarkantha and Kaira district, but microcline seems to have come from the veins near Valasana in the Mehsana district. Where these stones were worked is still not known. Further work at Shamalaji might shed some light on this problem.

Pottery—Foreign Ware and route

Out of the many types of pottery that were obtained at Devnimori, at least the amphorae is a foreign import. It is found at Nagara[1], Vala[2], Dwarka[3], Somanath[4], in Gujarat. It seems that there was a regular route between Nagara and Shamalaji. The intermediary stations of Tarapur, Dehgam, Kathlal have given evidence of contemporary antiquities. At Modasa also an ancient settlement might have existed, but its lower strata are not yet studied. On this route the material that was imported from the Western World moved towards Shamalaji. From Shamalaji this material entered the Buddhist Settlement of Devnimori.

---

[1] SHAH U. P., MEHTA, R. N., Nagara (An Early Historic Site) *J.O.I.*, Vol. XI, No. 4, p. 403 ff.

[2] MEHTA, R. N., Valabhipur of the Maitrakas, *J.O.I.* Vol. XIII No. 3, p. 274.

[3] I am grateful to Dr. Sankalia for this information.

[4] Lying in the Deccan College, Poona.

The other types of pottery are also obtained from Vadnagar, Nagara, Vala, Baroda and other sites, suggesting thereby that they were wide-spread in this region. The stamped ware was obtained from Kolhapur, Maheshwara and other sites, suggesting that it had a much wider spread.

The other interesting type is the pot-face. It is obtained also in the Western World in contemporary years. Further work on this interesting type is necessary in India to understand its significance.

Silk

The silk that was found from the Casket II was thrown. It, therefore, suggests that either the technique of throwing silk was known here or it was an import. The Mandasor inscription stating that the silk weavers of Lata migrated to Mandasor,[1] indicates that silk weaving was well-known in Lata. This industry might have been responsible for weaving this silken material.

Copper, silver etc.

The copper box with a slip-on-lid, gold and silver foils, are the other metals besides iron, that is already noted. Copper and silver mines are found in Rajasthan. Interesting study of the Atlas figure and a Kshatrapa coin both suggest that the metal had come from the mines of Rajasthan.

Ideas and Materials

Thus the study of the structures and the materials discovered from Devnimori indicate that this settlement used the ideas current in Western India and the material was mostly procured from this region. Very few items came from far off countries.

Other mounds

The excavations on other mounds at Devnimori indicate that the Shaivas also had built their temples here. Some of them were contemporary to the Buddhist settlement. Excavation of a mound with a Shivaling indicated that the first phase of the temple was raised on the black natural earth. The bricks used for this construction are of the size that the Buddhists also used. Discovery of numerous images of Hindu deities from this area point to the fact that this valley was occupied by the Hindu mendicants also.

---

[1] Sircar, D.C., *Select Inscriptions*, p. 288.

The explorations revealed the existence of eighteen bunds constructed for water reservoirs. At least some of them were contemporary to these settlements.

Conclusions

All these features indicate that the inhabitants of the early centuries of the Christian Era very well exploited the region. The town of Shamalaji was the centre of activity. The monks occupied the nearby valley. The Buddhists preferred to live in the open whereas the Shaivites occupied the inner parts or the sides of the mountains. The deeper parts of the valley were used to store necessary water for agricultural purposes, and the forest on the mountains served as the source of wood, used for various purposes.

Looking from a longer range it seems that the Valley of Devnimori revealed very interesting phenomena, that the people occupying this valley at different periods, exploited the area according to their need. The hunters of the Stone Age used the loessic area, where they could live on rather dry earth and could trace the foot-prints of the animals. The Buddhist Samgha preferred the open area on the river, whereas the other sects specially the Shaivites preferred more lonely places as could be judged from their temples. The Buddhists erected lovely stupa and a fine settlement in beautiful natural environment in this valley.

APPENDIX

Devnimori, A Microlithic site of North Gujarat

This brief report deals with the results of a small excavation in 1961 of the microlithic mound at Devnimori (Sabarkantha district) of North Gujarat, India. In Gujarat, the discoveries of prehistoric sites by Robert Bruce Foote[1] were continued by H.D. Sankalia who excavated Langhnaj (LNJ) in 1941 and subsequently.[2] This resulted in the discovery of animal remains and seven human skeletons in addition to a large number of microliths. Later, Subbarao's[3] work brought to light many hundreds of microlithic sites in the sandy plains of central and northern Gujarat and it also confirmed Sankalia's work when the M. S. University of Baroda further excavated Langhnaj in 1953-54. The late Prof. Zeuner was also very closely associated with this work in North Gujarat[4] as he was with general Indian prehistory.

A quarter of a mile south of Bhoja-Raja No Tekro of Devnimori lies the microlithic mound designated as Dhenk-Vadlo (DVK) from which the main collection of microliths was obtained. Microliths were also collected from a trial trench on a mound (DVM) adjacent to the historic mound, south of the Vihara-1 (monastery), and from the surface.

A trench 50′ by 10′ was laid towards the centre, on the DVK mound, sloping northwards. It was subdivided into subsquares A,B,C,D and E from north to south. The trench line was extended towards the highest point of the mound where subsquare K was chalked out. The excavated area of subsquares A, B, C, and D was 10′ by 10′ each and of E and K was 10′ by 5′. The trial trench DVM (30′ × 10′) was subdivided into three, Pits I, II and III.

---

[1] FOOTE, R. B., *Indian Prehistoric and Protohistoric Antiquities, Notes on their Ages and Distribution,* Madras, 1916.

[2] SANKALIA, H. D., *Investigations into the Prehistoric Archaeology of Gujarat*, Baroda, 1946.
SANKALIA, H. D., "Excavations at Langhnaj," *Man*, Vol. LV, 33, February, 1955. London.

[3] SUBBARAO, B., "Archaeological Explorations in the Mahi Valley," *Journal of the Maharaja Sayajirao University of Baroda,* Vol. 1, 1952.

[4] ZEUNER, F. E., "The Microlithic Industry of Gujarat," *Man*, Vol. LII, 182, 1952. London.

There was no visible stratification, to start with, and hence, arbitrary layers at every 6″ interval were formed. From each such layer soil samples were taken and the microliths sorted out. In subsquares A and E historic potsherds and large building stones were found along with the microliths but as the lower layers were reached—in the soft morning and evening light—one could discern the dark soil pit lines cutting through the '*in situ*' stratification. The pottery etc., was therefore intrusive. The main concentration of microliths was upto 3′ and it petered out below this depth. Calcium concretions (kankar) appeared after five feet and it was only after this depth was reached that the stratification began to be visible. Stratification of the layers was thus in this order: 6″-8″ of top loose soil, from about 8″ to 1′-11″ a dark brown soil, from 1′-11″ to 4′-3″ a loose brown soil, and from 4′-3″ to about 8′-2″ a soft sandy light brown soil. In the DVM trial trench the depth from which the microliths were recovered is the same as at DVK, that is, there is a scarcity of microliths after 3′ and none occur by 4½′. Stratification was not as clear perhaps because of the proximity of the historic mound but the trench itself showed no pits etc.

The analysis of the soil samples showed the presence of a humic horizon at about six feet below the surface of the mound.[1] The main microlithic phase at Langhnaj belongs to the buried soil phase when man must have occupied these dunes due to an interruption in wind activity during one of the comparatively wetter periods with slightly heavier rainfall.[2] At Langhnaj there is also a pottery microlithic phase[3] belonging to the latest (post-soil) dry phase. The Devnimori industry appears to belong to the latest 'Langhnaj culture' albeit devoid of pottery.

Following is the typological classification of microlithic material recovered from the Devnimori excavations :—

---

[1] Analysed by Mr. K.T.M. Hegde, Lecturer in Archaeological Chemistry, Department of Archaeology, M. S. University of Baroda.

[2] Sankalia, H. D., "The Microlithic Industry of Langhnaj, Gujarat," *Journal of the Gujarat Research Society*, Vol. XVIII, No. 4, 1956. Bombay.

[3] Zeuner, F. E., *Stone Age and Pleistocene Chronology in Gujarat*. Deccan College Monograph Series 6. 1950. Poona.

DEVNIMORI

Type	*DVK*	*DVM*	*Surface*
	percent % — *No.*	*percent %* — *No.*	*percent %* — *No.*
a. Flakes showing use.	3.6 — 50	0.64 — 1	33.0 — 44
b. Flakes retouched, mostly to form points.	2.05 — 28	0.64 — 1	6.0 — 8
c. Blades and blade fragments.	10.5 — 143	6.4 — 10	14.25 — 19
d. Retouched blades.	1.7 — 24	0.64 — 1	1.5 — 2
e. Lunates.	0.806 — 11	0.64 — 1	1.5 — 2
f. Penknife blades.	0.14 — 4	.. ..	4.5 — 6
g. Triangles.	.. ..	.. ..	1.5 — 2
h. Shouldered point.	.. ..	.. ..	2.25 — 3
i. End Scrapers.	.. ..	1.28 — 2	.. ..
j. Steep Core Scrapers.	.. ..	1.28 — 2	.. ..
k. Awl.	.. ..	.. ..	1.5 — 2
l. Side Scrapers.	.. ..	.. ..	6.75 — 9
m. i. Regular Cores.	2.4 — 38	8.32 — 13	20.25 — 27
ii. Irregular Cores.	0.5 — 7	7.04 — 11	2.25 — 3
iii. Core Remains.	1.15 — 16	3.20 — 5	6.75 — 9
iv. Core fragments.	4.16 — 57	8.96 — 14	.. ..
q. Reject flakes.	30.7 — 419	28.16 — 44	.. ..
r. Outright rejects.	41.6 — 570	31.36 — 49	.. ..
Total ..	99.506 — 1385	100.56 — 155	102 — 133

DVK TRENCH

Approximate percentage distribution of types—depthwise

Types	*a*	*b*	*c*	*d*	*e*	*m i*	*m ii*	*m iii*	*m iv*	*q*	*r*
0′–1′ DEPTH	44.0	31.1	51.05	45.5	72.7	39.5	42.8	56.2	43.2	42.9	56.8
1′–2′ ,,	42.0	46.4	38.3	37.5	9.09	34.2	42.8	37.5	35.1	36.4	28.2
2′–3′ ,,	12.0	21.4	8.3	16.6	9.09	18.4	......	5.2	14.0	10.2	10.3
3 feet onwards	2.0	......	2.09	......	9.09	7.8	14.2	5.2	10.2	10.2	1.4
Total ..	100.0	98.9	99.74	99.6	99.97	99.9	99.8	104.1	102.5	99.7	96.7

Typology.

The raw material predominantly utilized for the Devnimori industry is milky quartz because it is easily accessible in the vicinity as outcrops. The ratio of quartz to other cryptocrystalline material such as chert, jasper, etc., is 3:1. This exclusive use of quartz is also the case for the Tinnevelly 'teri' sites,[1] the Mysore microlithic industries[2] and the industry from Bala Nadi in the Singrauli basin.[3] However, this refutes the idea of the exclusive distribution of quartz microlithic industries in Eastern, Central India or South India in Late Stone Age times,[4] since Gujarat in Western India has frequently used quartz for its microlithic industries along with the apparently better cryptocrystalline raw material.

A study of the present collection shows that the microlithic industry is of a mixed nature, predominantly characterized by flakes, flake-blades, blunted-back blades and lunates, steeply retouched flakes, points made accidentally or intentionally, along with crude flakes. The Devnimori industry seems to be better worked and retouched than the Langhnaj collection but the types are common to both. The quantity of waste flakes is proportionately much more in the Langhnaj collection (85%) than in the Devnimori one (71%) and fluted cores are not as common in the former. In addition, there are stone fragments which show no bulb of percussion at all but these must have been broken accidentally because of bad raw material. In the bulk of the material most specimens consist of cores and flakes, regular tool-types being few. But the scarcity of finished products is quite understandable because of the delicate nature of specimens and that the good ones get utilized.

The collections are quite indifferent as compared to microlithic industries found outside India as is the case with other sites in India. A major portion of the collections from excavated 'factory' sites comprise primary flakes sometimes showing use, sometimes the natural shape such as a flake with a point being utilized.

---

[1] ZEUNER, F. E. and ALLCHIN, B. "The Microlithic Sites of Tinnevelly District, Madras State," *Ancient India* No. 12. New Delhi. 1956.

[2] SESHADHRI, M., *Stone Using Cultures of Prehistoric and Protohistoric Mysore*, London, 1956.

[3] KRISHNASWAMI, V. D. and SOUNDARAJAN, K. V., "The lithic tools of the Singrauli basin District Mirzapur." *Ancient India* No. 9. New Delhi. 1951.

[4] ALLCHIN, B., "The Indian Middle Stone Age: Some New Sites in Central and Southern India, and their Implications." *Bulletin of the London University Inst. of Arch.* No. 11. 1959. London.

The most familiar tool is the lunate which has a varying length and some lunates have the arc bulging near one end to form a point and others are broader and less crescentic to form a splayed lunate (transverse arrow-head). In this wide range of lunates it becomes very difficult to separate triangles from angular lunates. As on other sites in India the trapeze is rare. Next in order to the lunates come the backed blades with curved or straight back, partially or completely retouched along one of the parallel edges.

In Gujarat, Zeuner[1] and Sankalia[2] have noted the presence of the asymmetrical point which is made from a thick flake with a high rib by the method of backing one of the sides obliquely away until a sharp point is obtained. Zeuner interprets this point as the characteristic of the Indian microlithic 'hunting' industries which is utilized as an arrow-head. The present collection did not produce any indisputable specimen of the asymmetrical point.

Scrapers of various kinds such as those present in the Middle Stone Age industries are part of the 'tool-kit' but they do not characterize the microlithic industries. At most sites, such as at Adamgarh[3] and other surface sites in the Bombay and Satara districts[4] such 'larger' tools are a normal complement of the microlithic industries and form the 'macro-facies'.

Conclusion

Late Stone Age-microlithic-sites have been found all along the West Coast during the past several years and in fact, explorations in recent years[5] have shown that microlithic sites are distributed all over India. But there is acute scarcity of excavated material found in, specially, datable geological deposits that can be correlated irrespective of typology from various parts of the country. It is only from Tinnevelly 'teri' sites that there is any direct datable evidence.[6]

---

[1] ZEUNER, F. E., 1952. op. cit.

[2] SANKALIA, H. D., 1956. op. cit.

[3] MALIK, S. C. " Recent Explorations in Hoshangabad." *Journal of the M. S. University of Baroda.* Vol. VIII, No. 1. 1959. Baroda.

[4] MALIK, S. C., *Stone Age Industries of the Bombay and Satara Districts.* M. S. University Archaeology Monograph Series No. 4. Baroda. 1959.

[5] *Indian Archaeology—A Review.* 1953 onwards. Govt. of India. New Delhi.

[6] ZEUNER, F. E., and ALLCHIN, B. 1956. op. cit.

In North Gujarat the Langhnaj soil sequence gives the climatic phases[1] and it is the same at Devnimori, indicating that these windblown deposits are not recent. The Devnimori microlithic industry belongs to the latest of the two phases of the Gujarat Late Stone Age but without the association of pottery. However, if it is true that pottery is essentially part of the microlithic 'cultures' as at Langhnaj, then, the conclusion regarding the Devnimori microlithic phase must await further examination and excavation of several new Late Stone Age sites in Gujarat. Indian microlithic industries cannot be dated by typological comparisons with microlithic industries of Europe and Africa. One cannot also apply the presence or absence of pottery too rigidly in considering the chronological position. The criteria will have to be geochronological in the final analysis.

---

[1] ZEUNER, F. E., 1950. *op. cit.*

INDEX

Acanthus—124, 126, 127, 131, 132, 139, 150, 152, 155, 156, 157, 158, 160, 161, 162, 163, 164, 165, 168, 169, 170, 180
Adhera—2
Africa—193
Agnivarma—180
Ahmedabad—1
Ahmednagar—185
Amitabha—129
Amphorae—69
Amphorae sherds—77
Anandapura—177
Antarala—46, 56, 60
Apollo—127
Aravalli—1, 2
Ardhamilita Netra—143
Arya Sammitiya Nikaya—177
Asanga—183
Asia-minor—124
Asymmetrical Point—192
Assyria—129
Assyrian—131
Athena—129
Atlas—186

Bakrol—2
Bala Nadi—191
Baroda—1, 27, 186
Bay-leaf—139, 166
Bay or Laurel—161
Bead and reel—131, 153, 155, 156, 159, 160
Bhandaria—185
Bhartrudaman—108, 110
Bhikshu Anagarika Govinda—183
Bhiloda—1
Bhils—3, 31
Bhoja-No-Timbo—3
Bhoja Raja—3
Bhoja Raja-No-Tekro—3, 4, 6, 7, 9, 12, 15, 17, 19, 188
Bodhisattvas—177, 178
Bombay—192
Bovine—172, 173, 184
Buddha—31, 47, 49, 56, 60, 87, 89, 130, 132, 133, 134, 135, 140, 141, 142, 144, 146, 154, 163, 167, 177, 178, 181, 184

Casket—28, 49, 51, 56, 118, 120, 174, 175, 181, 182
Casket-II—120, 121, 183, 186
Chaitya—15, 21, 25, 29, 33, 64, 107, 108, 109, 110, 112, 113, 114, 115, 129, 130, 180
Chandragupta II—182
Chapra—2
Chatushala—21, 34, 176
Chequer Pattern—166
Chhatravali—49, 60, 61
Christian Era—27, 184, 187
Conch—167, 171
Copper Box—120, 186
Corinthian—124, 127

Dadhalia—2, 64
Dakshinavarta Romaraji—144
Dashabala—180
Dehgam—186
Degamda—2
Deval—185
Devnimori—1, 2, 6, 7, 9, 10, 77, 84, 116, 121, 123, 124, 127, 129, 131, 133, 140, 142, 144, 172, 176, 177, 178, 180, 181, 182, 183, 185, 186, 187, 188, 189, 191, 193
Dharma—132
Dharma karka—84
Dharma pradipika—144
Dhenk Vadalo—7, 188
Dhyanamudra—130, 135, 141, 146, 163, 167
Dhyani Buddha—15
Dog—172, 184
Dungarpur—3, 177
Dvibhanga—130
Dwarka—185

Egypt—129
Egyptian—131
Europe—193

Flower vase—131
Foote Robert Bruce—188

Gandhara—123, 180, 181, 182
Gaz Dheri—120, 181
Ghantasila—61, 180
Ghatpallava—153
Goetz, H. (Dr.)—7
Gold-Bottle—120
Gold vessel—174
Grape leaf—160
Greco-Roman—123, 124, 132
Greek—124, 127, 131, 132
Grotesque—130
Gujarat—1, 3, 33, 186, 188, 191, 193
Gujarat State—1
Gupta Coins—27

Harmika—49
Hearth—41
Hematpur—2, 6
Hieun Tsang—177
Himatnagar—185
Hinayanists—178
Hindu Temple—10

Idar State—7
Inamdar, P. A.—7
India—27, 129, 186, 188, 191
Indo Afghan—181
Indo-Corinthian—124, 127, 161
Indo-Sassanian—27, 104
Isari—3
Isis—129
I-tsing—177, 178, 180, 183

Java—61
Jitpur—2, 64
Jnana—143
Junagarh—182

Kaira—177, 185
Kasia—183
Kataccuri Era—28
Kathlal—186
Kathika—28, 121
Kodar Vechat—12, 19
Kolhapur—186
Kshatrapa Coins—104, 105
Kshatrapa Period—27
Kshatrapas—28, 104, 107, 108, 110, 112, 113, 182, 186
Kudel—2
Kulas—180
Kushana—181, 182

Lakshanas—135
Lakshmi—129
Lalitavistara—144
Langhnaj—188, 189, 191
Lata—177, 186
Laurel—124, 129, 132, 166, 168, 180
Laurel or Bay—164
Lauriya Nandangarh—161
Lemdi—185
Lion—131, 150
Lotus—124, 129, 153
Lotus Petals—156, 157, 158, 159, 160, 169, 171
Lusadia—2

Mahakshatrapa—106, 107, 108, 109, 110, 111, 114
Mahapadhana Sutta—144
Mahapurusha—135, 143
Mahastupa—25, 28, 29, 45, 66, 67, 118, 123, 133, 140, 142
Mahavihara—29, 30, 176, 178
Mahayana—178
Mahayanists—177
Maheshwar—27, 186
Mahishamardini—30
Maitrakas—104, 115
Majmudar, M. R. (Dr.)—7
Medusa—181
Malik, S. C. (Dr.)—10
Malva—177
Mandasor—186
Mathugam—185
Mathura—127
Mehsana—177, 185
Menander—181

Meshvo—1, 2, 3, 64
Mewar—3
Mirpur-Khas—131, 136, 182
Modasa—186
Museé Guimet—61

Nagara—185, 186
Nandangarh—180
Nidana Sutra—183
North Gujarat—6, 188, 193
N. W. F. P.—120

Occident—123
Olive—124, 129, 153, 155, 158, 159, 160, 161, 180
Orisis—129

Padardi—6
Padmapani—129
Padmasana—141
Paharpur—61
Painted pottery—84
Painted-Red Ware—69
Painted Ware—27
Pradakshina Patha—30, 46, 47, 49, 51, 56, 60
Prana—134
Punjab—180

Rajputs—3, 7, 31
Rajasthan—1, 186
Ramagupta—182
Rampur—6
Red Polished Ware—27, 69, 82
Relic Casket—17
Roda—7
Roman—124, 131, 132
Roman Amphorae—27
Roman World—27
Rome—129
Rudrasahasa—113
Rudrasena—28
Rudrasena I—106, 107, 108, 109
Rudrasena II—106
Rudrasena III—28, 29
Rudrasena—108, 110
Rudrasimha II—113

Sabarkantha—1, 177, 185, 188
Sadhu Agnivarmma—10
Samgha—132, 187
Samgharamas—177
Sammitya Nikaya—178
Samudra gupta—182
Sangharama—19
Sanghati—142, 144
Sankalia H. D. (Dr.)—188, 192
Sarken—185
Satara—192
Sarvabhattaraka—30, 116
Shah, U. P. (Dr.)—7
Shalihundam—176
Shamlaji—1, 2, 3, 7, 11, 31, 176, 184, 185, 186, 187
Sharira Stupa—10, 45
Shinkot Steatite Casket—181
Shiva-Linga—4
Shyam Sarovara—9
Sind—180, 182
Sindhu—177
Silk—186
Silk-Bags—120
Singrauli—191
Soft murrum—19
Somnath—185
Stamped and incised ware—79
Stamped Ware—27, 69
Stupa—12, 17, 19, 21, 25, 26, 28, 29, 33, 44, 46, 47, 49, 51, 56, 60, 61, 62, 63, 64, 67, 68, 140, 141, 154, 178, 180, 182, 183, 184, 187
Sudarshana—10, 180
Svami Rudrasen III—114

Tarapur—186
Taxila—130
Thakardas—3, 31
Thakore Amarsimhaji—3
Triranta—93, 132, 153
Timbarva—27
Tinnevelly—191, 192

Uddesha Stupas—10, 45
Ujjain—104

Urna—135, 142, 146
Usnisa—144

Vala—185,186
Vadnagar—27, 84, 186
Valabhi—27, 104
Valasana—185
Vihara—14, 15, 21, 24, 26, 31, 33, 34, 35, 36, 38, 42, 44, 45, 63, 65, 66, 68, 93, 116, 140, 176, 178, 188
Vihara I—19, 21 24, 25, 30, 34
Vihara II—25, 26, 29, 30, 178
Viradamaputra—107
Vishnu—30
Vishvasena—28, 110, 111, 112
Vitruvius—124
Votive Stupa—19, 25, 29, 62, 63, 90
Vyakhayana-Pitha—43, 44

Yanas—178
Yantra—183
Yashodaman IInd—113
Yogi—135, 146

Zeuner—188, 192

THE M. S. UNIVERSITY ARCHAEOLOGY AND ANCIENT HISTORY SERIES

		Price Rs.
1.	**Baroda Through The Ages**—Dr. Bendapudi Subbarao	**18-00**
2.	**Excavation At Timbarva**—R. N. Mehta	**5-00**
3.	**The Personality of India**—Dr. B. Subbarao (*2nd Edition*)	**24-00**
4.	**Stone Age Industries in Bombay and Satara Dist.**—S. C. Malik	**12-00**
5.	**Indian History—A Study in Dynamics**—Y. A. Raikar	**5-00**
6.	**The Abhiras—Their History and Culture**—Bhagwansingh Suryavanshi	**12-00**
7.	**The Pleistocene Deposits of the Lower Narmada River and Early Stone Age Industries from the River Chambal**—G. J. Wainwright	**20-00**
—	**Excavations at Maheshwar and Navdatoli**—H. D. Sankalia, B. Subbarao and S. B. Deo	**35-00**
8.	**Excavation at Devnimori**—R. N. Mehta, S. N. Chowdhary	**45-00**

Can be had from

UNIVERSITY PUBLICATIONS SALES UNIT,
Near Palace Gate, Palace Road, BARODA-1 (India)

राज्य संग्रहालय का [illegible]. लखनऊ
क्रम सं. 3746
प्राप्ति तिथि 22-7-60
State Museum, Library, Lko.